



1

SEQUENCE LISTING

<110> MANNING, GERARD
SUDARSANAM, SUCHA

<120> METHOD FOR SELECTIVELY INHIBITING FUNGAL GROWTH

<130> 034536/0323

<140> 10/618,581

<141> 2003-07-15

<150> 60/395,624

<151> 2002-07-15

<160> 42

<170> PatentIn Ver. 2.1

<210> 1

<211> 1064

<212> PRT

<213> *Saccharomyces cerevisiae*

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Ser	Thr	Met	Ala	Pro	Ala	Thr	Leu	Arg	Met	Met	Gly	Lys	Ser	Pro	Gln	
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Gln	Gln	Gln	Gln	Gln	Asn	Thr	Pro	Leu	Met	Pro	Pro	Ala	Asp	Ile	Lys	
		50				55					60					
Tyr	Ala	Asn	Asn	Gly	Asn	Ser	His	Gln	Ala	Glu	Gln	Lys	Glu	Arg	Gln	
65					70					75					80	
Val	Glu	Leu	Glu	Gly	Lys	Ser	Arg	Glu	Asn	Ala	Pro	Lys	Pro	Asn	Thr	
			85						90					95		
Thr	Ser	Gln	Ser	Arg	Val	Ser	Ser	Ser	Gln	Gly	Met	Pro	Lys	Gln	Phe	
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His	Arg	Lys	Ser	Leu	Gly	Asp	Trp	Glu	Phe	Val	Glu	Thr	Val	Gly	Ala	
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Gly	Ser	Met	Gly	Lys	Val	Lys	Leu	Ala	Lys	His	Arg	Tyr	Thr	Asn	Glu	
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Val	Cys	Ala	Val	Lys	Ile	Val	Asn	Arg	Ala	Thr	Lys	Ala	Phe	Leu	His	
145					150					155					160	
Lys	Glu	Gln	Met	Leu	Pro	Pro	Pro	Lys	Asn	Glu	Gln	Asp	Val	Leu	Glu	
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Arg	Gln	Lys	Lys	Leu	Glu	Lys	Glu	Ile	Ser	Arg	Asp	Lys	Arg	Thr	Ile
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Leu	Phe	Glu	Met	Cys	Thr	Leu	Ser	Asn	His	Phe	Tyr	Met	Leu	Phe	Glu
	210					215					220				
Tyr	Val	Ser	Gly	Gly	Gln	Leu	Leu	Asp	Tyr	Ile	Ile	Gln	His	Gly	Ser
225					230					235					240
Ile	Arg	Glu	His	Gln	Ala	Arg	Lys	Phe	Ala	Arg	Gly	Ile	Ala	Ser	Ala
				245					250					255	
Leu	Ile	Tyr	Leu	His	Ala	Asn	Asn	Ile	Val	His	Arg	Asp	Leu	Lys	Ile
			260					265					270		
Glu	Asn	Ile	Met	Ile	Ser	Asp	Ser	Ser	Glu	Ile	Lys	Ile	Ile	Asp	Phe
		275					280					285			
Gly	Leu	Ser	Asn	Ile	Tyr	Asp	Ser	Arg	Lys	Gln	Leu	His	Thr	Phe	Cys
	290					295					300				
Gly	Ser	Leu	Tyr	Phe	Ala	Ala	Pro	Glu	Leu	Leu	Lys	Ala	Asn	Pro	Tyr
305					310					315					320
Thr	Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Phe	Gly	Val	Val	Leu	Phe	Val
				325					330					335	
Leu	Val	Cys	Gly	Lys	Val	Pro	Phe	Asp	Asp	Glu	Asn	Ser	Ser	Val	Leu
			340					345					350		
His	Glu	Lys	Ile	Lys	Gln	Gly	Lys	Val	Glu	Tyr	Pro	Gln	His	Leu	Ser
		355					360					365			
Ile	Glu	Val	Ile	Ser	Leu	Leu	Ser	Lys	Met	Leu	Val	Val	Asp	Pro	Lys
	370					375					380				
Arg	Arg	Ala	Thr	Leu	Lys	Gln	Val	Val	Glu	His	His	Trp	Met	Val	Arg
385					390					395					400
Gly	Phe	Asn	Gly	Pro	Pro	Pro	Ser	Tyr	Leu	Pro	Lys	Arg	Val	Pro	Leu
				405					410					415	
Thr	Ile	Glu	Met	Leu	Asp	Ile	Asn	Val	Leu	Lys	Glu	Met	Tyr	Arg	Leu
			420					425					430		
Glu	Phe	Ile	Asp	Asp	Val	Glu	Glu	Thr	Arg	Ser	Val	Leu	Val	Ser	Ile
		435					440					445			
Ile	Thr	Asp	Pro	Thr	Tyr	Val	Leu	Leu	Ser	Arg	Gln	Tyr	Trp	Thr	Leu
	450					455					460				
Ala	Ala	Lys	Met	Asn	Ala	Glu	Ser	Ser	Asp	Asn	Gly	Asn	Ala	Pro	Asn
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Ile Thr Glu Ser Phe Glu Asp Pro Thr Arg Ala Tyr His Pro Met Ile
 485 490 495
 Ser Ile Tyr Tyr Leu Thr Ser Glu Met Leu Asp Arg Lys His Ala Lys
 500 505 510
 Ile Arg Asn Gln Gln Gln Arg Gln Ser His Glu Asn Ile Glu Lys Leu
 515 520 525
 Ser Glu Ile Pro Glu Ser Val Lys Gln Arg Asp Val Glu Val Asn Thr
 530 535 540
 Thr Ala Met Lys Ser Glu Pro Glu Ala Thr Leu Ala Thr Lys Asp Thr
 545 550 555 560
 Ser Val Pro Phe Thr Pro Lys Asn Ser Asp Gly Thr Glu Pro Pro Leu
 565 570 575
 His Val Leu Ile Pro Pro Arg Leu Ala Met Pro Glu Gln Ala His Thr
 580 585 590
 Ser Pro Thr Ser Arg Lys Ser Ser Asp Asn Gln Arg Arg Glu Met Glu
 595 600 605
 Tyr Ala Leu Ser Pro Thr Pro Gln Gly Asn Asp Tyr Gln Gln Phe Arg
 610 615 620
 Val Pro Ser Thr Thr Gly Asp Pro Ser Glu Lys Ala Lys Phe Gly Asn
 625 630 635 640
 Ile Phe Arg Lys Leu Ser Gln Arg Arg Lys Lys Thr Ile Glu Gln Thr
 645 650 655
 Ser Val Asn Ser Asn Asn Ser Ile Asn Lys Pro Val Gln Lys Thr His
 660 665 670
 Ser Arg Ala Val Ser Asp Phe Val Pro Gly Phe Ala Lys Pro Ser Tyr
 675 680 685
 Asp Ser Asn Tyr Thr Met Asn Glu Pro Val Lys Thr Asn Asp Ser Arg
 690 695 700
 Gly Gly Asn Lys Gly Asp Phe Pro Ala Leu Pro Ala Asp Ala Glu Asn
 705 710 715 720
 Met Val Glu Lys Gln Arg Glu Lys Gln Ile Glu Glu Asp Ile Met Lys
 725 730 735
 Leu His Asp Ile Asn Lys Gln Asn Asn Glu Val Ala Lys Gly Ser Gly
 740 745 750
 Arg Glu Ala Tyr Ala Ala Gln Lys Phe Glu Gly Ser Asp Asp Asp Glu
 755 760 765
 Asn His Pro Leu Pro Pro Leu Asn Val Ala Lys Gly Arg Lys Leu His
 770 775 780

Pro Ser Ala Arg Ala Lys Ser Val Gly His Ala Arg Arg Glu Ser Leu
 785 790 795 800
 Lys Tyr Met Arg Pro Pro Met Pro Ser Ser Ala Tyr Pro Gln Gln Glu
 805 810 815
 Leu Ile Asp Thr Gly Phe Leu Glu Ser Ser Asp Asp Asn Lys Ser Asp
 820 825 830
 Ser Leu Gly Asn Val Thr Ser Gln Thr Asn Asp Ser Val Ser Val His
 835 840 845
 Ser Val Asn Ala His Ile Asn Ser Pro Ser Val Glu Lys Glu Leu Thr
 850 855 860
 Asp Glu Glu Ile Leu Gln Glu Ala Ser Arg Ala Pro Ala Gly Ser Met
 865 870 875 880
 Pro Ser Ile Asp Phe Pro Arg Ser Leu Phe Leu Lys Gly Phe Phe Ser
 885 890 895
 Val Gln Thr Thr Ser Ser Lys Pro Leu Pro Ile Val Arg Tyr Lys Ile
 900 905 910
 Met Phe Val Leu Arg Lys Met Asn Ile Glu Phe Lys Glu Val Lys Gly
 915 920 925
 Gly Phe Val Cys Met Gln Arg Phe Ser Ser Asn Asn Val Ala Ala Lys
 930 935 940
 Arg Glu Gly Thr Pro Arg Ser Ile Met Pro Leu Ser His His Glu Ser
 945 950 955 960
 Ile Arg Arg Gln Gly Ser Asn Lys Tyr Ser Pro Ser Ser Pro Leu Thr
 965 970 975
 Thr Asn Ser Ile His Gln Arg Lys Thr Ser Ile Thr Glu Thr Tyr Gly
 980 985 990
 Asp Asp Lys His Ser Gly Thr Ser Leu Glu Asn Ile His Gln Gln Gly
 995 1000 1005
 Asp Gly Ser Glu Gly Met Thr Thr Thr Glu Lys Glu Pro Ile Lys Phe
 1010 1015 1020
 Glu Ile His Ile Val Lys Val Arg Ile Val Gly Leu Ala Gly Val His
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 Ser Ile Leu Lys Glu Leu Lys Leu
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<211> 1147

<212> PRT

<213> *Saccharomyces cerevisiae*

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Thr Arg Val Ala Ala Pro Ala Thr Leu Arg Met Met Gly Lys Gln Ser
35 40 45

Gly Pro Arg Asn Asp Gln Gln Gln Ala Pro Leu Met Pro Pro Ala Asp
50 55 60

Ile Lys Gln Gly Lys Glu Gln Ala Ala Gln Arg Gln Asn Asp Ala Ser
65 70 75 80

Arg Pro Asn Gly Ala Val Glu Leu Arg Gln Phe His Arg Arg Ser Leu
85 90 95

Gly Asp Trp Glu Phe Leu Glu Thr Val Gly Ala Gly Ser Met Gly Lys
100 105 110

Val Lys Leu Val Lys His Arg Gln Thr Lys Glu Ile Cys Val Ile Lys
115 120 125

Ile Val Asn Arg Ala Ser Lys Ala Tyr Leu His Lys Gln His Ser Leu
130 135 140

Pro Ser Pro Lys Asn Glu Ser Glu Ile Leu Glu Arg Gln Lys Arg Leu
145 150 155 160

Glu Lys Glu Ile Ala Arg Asp Lys Arg Thr Val Arg Glu Ala Ser Leu
165 170 175

Gly Gln Ile Leu Tyr His Pro His Ile Cys Arg Leu Phe Glu Met Cys
180 185 190

Thr Met Ser Asn His Phe Tyr Met Leu Phe Glu Tyr Val Ser Gly Gly
195 200 205

Gln Leu Leu Asp Tyr Ile Ile Gln His Gly Ser Leu Lys Glu His His
210 215 220

Ala Arg Lys Phe Ala Arg Gly Ile Ala Ser Ala Leu Gln Tyr Leu His
225 230 235 240

Ala Asn Asn Ile Val His Arg Asp Leu Lys Ile Glu Asn Ile Met Ile
245 250 255

Ser Ser Ser Gly Glu Ile Lys Ile Ile Asp Phe Gly Leu Ser Asn Ile
260 265 270

Phe	Asp	Tyr	Arg	Lys	Gln	Leu	His	Thr	Phe	Cys	Gly	Ser	Leu	Tyr	Phe	275	280	285
Ala	Ala	Pro	Glu	Leu	Leu	Lys	Ala	Gln	Pro	Tyr	Thr	Gly	Pro	Glu	Val	290	295	300
Asp	Ile	Trp	Ser	Phe	Gly	Ile	Val	Leu	Tyr	Val	Leu	Val	Cys	Gly	Lys	305	310	315
Val	Pro	Phe	Asp	Asp	Glu	Asn	Ser	Ser	Ile	Leu	His	Glu	Lys	Ile	Lys	325	330	335
Lys	Gly	Lys	Val	Asp	Tyr	Pro	Ser	His	Leu	Ser	Ile	Glu	Val	Ile	Ser	340	345	350
Leu	Leu	Thr	Arg	Met	Ile	Val	Val	Asp	Pro	Leu	Arg	Arg	Ala	Thr	Leu	355	360	365
Lys	Asn	Val	Val	Glu	His	Pro	Trp	Met	Asn	Arg	Gly	Tyr	Asp	Phe	Lys	370	375	380
Ala	Pro	Ser	Tyr	Val	Pro	Asn	Arg	Val	Pro	Leu	Thr	Pro	Glu	Met	Ile	385	390	395
Asp	Ser	Gln	Val	Leu	Lys	Glu	Met	Tyr	Arg	Leu	Glu	Phe	Ile	Asp	Asp	405	410	415
Ile	Glu	Asp	Thr	Arg	Arg	Ser	Leu	Ile	Arg	Leu	Val	Thr	Glu	Lys	Glu	420	425	430
Tyr	Ile	Gln	Leu	Ser	Gln	Glu	Tyr	Trp	Asp	Lys	Leu	Ser	Asn	Ala	Lys	435	440	445
Gly	Leu	Ser	Ser	Ser	Leu	Asn	Asn	Asn	Tyr	Leu	Asn	Ser	Thr	Ala	Gln	450	455	460
Gln	Thr	Leu	Ile	Gln	Asn	His	Ile	Thr	Ser	Asn	Pro	Ser	Gln	Ser	Gly	465	470	475
Tyr	Asn	Glu	Pro	Asp	Ser	Asn	Phe	Glu	Asp	Pro	Thr	Leu	Ala	Tyr	His	485	490	495
Pro	Leu	Leu	Ser	Ile	Tyr	His	Leu	Val	Ser	Glu	Met	Val	Ala	Arg	Lys	500	505	510
Leu	Ala	Lys	Leu	Gln	Arg	Arg	Gln	Ala	Leu	Ala	Leu	Gln	Ala	Gln	Ala	515	520	525
Gln	Gln	Arg	Gln	Gln	Gln	Gln	Gln	Val	Ala	Leu	Gly	Thr	Lys	Val	Ala	530	535	540
Leu	Asn	Asn	Asn	Ser	Pro	Asp	Ile	Met	Thr	Lys	Met	Arg	Ser	Pro	Gln	545	550	555
Lys	Glu	Val	Val	Pro	Asn	Pro	Gly	Ile	Phe	Gln	Val	Pro	Ala	Ile	Gly	565	570	575

Thr	Ser	Gly	Thr	Ser	Asn	Asn	Thr	Asn	Thr	Ser	Asn	Lys	Pro	Pro	Leu
			580					585					590		
His	Val	Met	Val	Pro	Pro	Lys	Leu	Thr	Ile	Pro	Glu	Gln	Ala	His	Thr
		595					600					605			
Ser	Pro	Thr	Ser	Arg	Lys	Ser	Ser	Asp	Ile	His	Thr	Glu	Leu	Asn	Gly
	610					615					620				
Val	Leu	Lys	Ser	Thr	Pro	Val	Pro	Val	Ser	Gly	Glu	Tyr	Gln	Gln	Arg
625					630					635					640
Ser	Ala	Ser	Pro	Val	Val	Gly	Glu	His	Gln	Glu	Lys	Asn	Thr	Ile	Gly
				645					650					655	
Gly	Ile	Phe	Arg	Arg	Ile	Ser	Gln	Ser	Gly	Gln	Ser	Gln	His	Pro	Thr
			660					665					670		
Arg	Gln	Gln	Glu	Pro	Leu	Pro	Glu	Arg	Glu	Pro	Pro	Thr	Tyr	Met	Ser
			675				680					685			
Lys	Ser	Asn	Glu	Ile	Ser	Ile	Lys	Val	Pro	Lys	Ser	His	Ser	Arg	Thr
	690					695					700				
Ile	Ser	Asp	Tyr	Ile	Pro	Ser	Ala	Arg	Arg	Tyr	Pro	Ser	Tyr	Val	Pro
705					710					715					720
Asn	Ser	Val	Asp	Val	Lys	Gln	Lys	Pro	Ala	Lys	Asn	Thr	Thr	Ile	Ala
				725					730					735	
Pro	Pro	Ile	Arg	Ser	Val	Ser	Gln	Lys	Gln	Asn	Ser	Asp	Leu	Pro	Ala
			740					745					750		
Leu	Pro	Gln	Asn	Ala	Glu	Leu	Ile	Val	Gln	Lys	Gln	Arg	Gln	Lys	Leu
		755					760					765			
Leu	Gln	Glu	Asn	Leu	Asp	Lys	Leu	Gln	Ile	Asn	Asp	Asn	Asp	Asn	Asn
	770					775					780				
Asn	Val	Asn	Ala	Val	Val	Asp	Gly	Ile	Asn	Asn	Asp	Asn	Ser	Asp	His
785					790					795					800
Tyr	Leu	Ser	Val	Pro	Lys	Gly	Arg	Lys	Leu	His	Pro	Ser	Ala	Arg	Ala
				805					810					815	
Lys	Ser	Val	Gly	His	Ala	Arg	Arg	Glu	Ser	Leu	Lys	Phe	Thr	Arg	Pro
			820					825					830		
Pro	Ile	Pro	Ala	Ala	Leu	Pro	Pro	Ser	Asp	Met	Thr	Asn	Asp	Asn	Gly
		835					840					845			
Phe	Leu	Gly	Glu	Ala	Asn	Lys	Glu	Arg	Tyr	Asn	Pro	Val	Ser	Ser	Asn
	850					855					860				
Phe	Ser	Thr	Val	Pro	Glu	Asp	Ser	Thr	Thr	Tyr	Ser	Asn	Asp	Thr	Asn
865					870					875					880

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Asn Arg Leu Thr Ser Val Tyr Ser Gln Glu Leu Thr Glu Lys Gln Ile
      885                      890                      895

Leu Glu Glu Ala Ser Lys Ala Pro Pro Gly Ser Met Pro Ser Ile Asp
      900                      905                      910

Tyr Pro Lys Ser Met Phe Leu Lys Gly Phe Phe Ser Val Gln Thr Thr
      915                      920                      925

Ser Ser Lys Pro Leu Pro Ile Val Arg His Asn Ile Ile Ser Val Leu
      930                      935                      940

Thr Arg Met Asn Ile Asp Phe Lys Glu Val Lys Gly Gly Phe Ile Cys
      945                      950                      955                      960

Val Gln Gln Arg Pro Ser Ile Glu Thr Ala Ala Val Pro Val Ile Thr
      965                      970                      975

Thr Thr Gly Val Gly Leu Asp Ser Gly Lys Ala Met Asp Leu Gln Asn
      980                      985                      990

Ser Leu Asp Ser Gln Leu Ser Ser Ser Tyr His Ser Thr Ala Ser Ser
      995                      1000                      1005

Ala Ser Arg Asn Ser Ser Ile Lys Arg Gln Gly Ser Tyr Lys Arg Gly
      1010                      1015                      1020

Gln Asn Asn Ile Pro Leu Thr Pro Leu Ala Thr Asn Thr His Gln Arg
      1025                      1030                      1035                      1040

Asn Ser Ser Ile Pro Met Ser Pro Asn Tyr Gly Asn Gln Ser Asn Gly
      1045                      1050                      1055

Thr Ser Gly Glu Leu Ser Ser Met Ser Leu Asp Tyr Val Gln Gln Gln
      1060                      1065                      1070

Asp Asp Ile Leu Thr Thr Ser Arg Ala Gln Asn Ile Asn Asn Val Asn
      1075                      1080                      1085

Gly Gln Thr Glu Gln Thr Asn Thr Ser Gly Ile Lys Glu Arg Pro Pro
      1090                      1095                      1100

Ile Lys Phe Glu Ile His Ile Val Lys Val Arg Ile Val Gly Leu Ala
      1105                      1110                      1115                      1120

Gly Val His Phe Lys Lys Val Ser Gly Asn Thr Trp Leu Tyr Lys Glu
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Leu Ala Ser Tyr Ile Leu Lys Glu Leu Asn Leu
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<210> 3

<211> 423

<212> PRT

<213> Schizosaccharomyces pombe

<400> 3

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			20					25					30		
His	Gln	Arg	Ser	Ile	Ser	Asp	Phe	Val	Gly	Thr	Ala	Gly	Pro	Gly	Arg
		35					40					45			
Gln	Val	Gly	Asn	Trp	Ile	Ile	Lys	Lys	Thr	Ile	Gly	Ala	Gly	Ser	Met
	50					55					60				
Gly	Lys	Val	Lys	Leu	Val	Val	Asn	Ile	Leu	Thr	Gly	Glu	Lys	Ala	Ala
65					70					75					80
Leu	Lys	Met	Ile	Pro	Phe	Thr	Pro	Asn	Asn	Thr	Ser	Gln	Thr	Val	Arg
				85					90					95	
Val	Gln	Arg	Glu	Ala	Leu	Leu	Gly	Arg	Leu	Leu	Arg	His	Pro	Asn	Ile
			100					105					110		
Cys	Arg	Val	Ile	Asp	Cys	Ile	Arg	Thr	Pro	Ala	Cys	Thr	Tyr	Ile	Leu
		115					120					125			
Phe	Glu	Tyr	Val	Pro	Gly	Gly	Gln	Leu	Leu	Glu	Tyr	Ile	Leu	Ala	Arg
	130					135					140				
Gly	Lys	Leu	Asp	Glu	Asp	Leu	Ala	Arg	Ser	Phe	Ala	Met	Gln	Leu	Ile
145					150					155					160
Asn	Ala	Leu	Val	Tyr	Leu	His	Lys	Asn	Phe	Ile	Val	His	Arg	Asp	Leu
				165					170					175	
Lys	Ile	Glu	Asn	Val	Leu	Leu	Thr	Gln	Asp	Ser	Arg	Gln	Val	Lys	Leu
			180					185					190		
Ile	Asp	Phe	Gly	Leu	Ser	Asn	Phe	Tyr	Ser	Lys	Asp	Asp	Leu	Leu	Arg
		195					200					205			
Thr	Tyr	Cys	Gly	Ser	Leu	Tyr	Phe	Ala	Ala	Pro	Glu	Leu	Leu	Asp	Ala
	210					215					220				
Lys	Pro	Tyr	Ile	Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Leu	Gly	Val	Val
225					230					235					240
Ile	Tyr	Val	Met	Val	Cys	Gly	Arg	Val	Pro	Phe	Asp	Asp	Val	Ser	Val
				245					250					255	
Pro	Met	Leu	His	Ser	Lys	Ile	Lys	Ser	Gly	Lys	Leu	Glu	Phe	Pro	Ser
			260					265					270		
Tyr	Ile	Ser	Glu	Asp	Cys	Cys	Ser	Leu	Ile	Ala	Ala	Met	Leu	Asn	Val
		275					280					285			
Asn	Pro	Arg	Lys	Arg	Cys	Ser	Leu	Glu	Gln	Ala	Ala	Lys	Phe	Pro	Trp
	290					295						300			

Leu Lys Lys Asn Ser Phe Cys Leu Tyr Leu Pro Ile Pro Leu Thr Ser
 305 310 315 320
 Ile Pro Ser Thr Pro Ser Ile Arg Ser His Val Phe Lys Pro Pro Phe
 325 330 335
 Asn Leu Lys Val Leu Gln Leu Leu His Glu His Gly Leu Ala Ser Ile
 340 345 350
 Pro Glu Leu Lys His Glu Leu Tyr Met Ala Tyr Ile Glu Arg Lys Thr
 355 360 365
 Thr Ser Leu Val Cys Leu Tyr Leu Leu Gly Val Glu Ser Leu Ala Pro
 370 375 380
 Ala Leu Arg Ile Pro Thr Ala Leu Pro Pro Val Tyr Ser Arg His Gln
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 Arg His His Ser Glu Ile Leu Gly Ala Met Asp Leu Thr Glu Lys Ile
 405 410 415
 Thr Ala Met Gln Cys Pro Pro
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 <213> Schizosaccharomyces pombe

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 Ala Ala Leu Asn Ala Leu Pro Lys Ile Lys Ile Ser Asp Ser Pro Asn
 20 25 30
 Arg His His Asn Leu Val Asp Ala Phe Met Gln Ser Pro Ser Tyr Ser
 35 40 45
 Thr Gln Pro Lys Ser Ala Val Glu Pro Leu Gly Leu Ser Phe Ser Pro
 50 55 60
 Gly Tyr Ile Ser Pro Ser Ser Gln Ser Pro His His Gly Pro Val Arg
 65 70 75 80
 Ser Pro Ser Ser Arg Lys Pro Leu Pro Ala Ser Pro Ser Arg Thr Arg
 85 90 95
 Asp His Ser Leu Arg Val Pro Val Ser Gly His Ser Tyr Ser Ala Asp
 100 105 110
 Glu Lys Pro Arg Glu Arg Arg Lys Val Ile Gly Asn Tyr Val Leu Gly
 115 120 125
 Lys Thr Ile Gly Ala Gly Ser Met Gly Lys Val Lys Val Ala His His
 130 135 140

Leu	Lys	Thr	Gly	Glu	Gln	Phe	Ala	Ile	Lys	Ile	Val	Thr	Arg	Leu	His	145	150	155	160
Pro	Asp	Ile	Thr	Lys	Ala	Lys	Ala	Ala	Ala	Ser	Ala	Glu	Ala	Thr	Lys	165	170	175	
Ala	Ala	Gln	Ser	Glu	Lys	Asn	Lys	Glu	Ile	Arg	Thr	Val	Arg	Glu	Ala	180	185	190	
Ala	Leu	Ser	Thr	Leu	Leu	Arg	His	Pro	Tyr	Ile	Cys	Glu	Ala	Arg	Asp	195	200	205	
Val	Tyr	Ile	Thr	Asn	Ser	His	Tyr	Tyr	Met	Val	Phe	Glu	Phe	Val	Asp	210	215	220	
Gly	Gly	Gln	Met	Leu	Asp	Tyr	Ile	Ile	Ser	His	Gly	Lys	Leu	Lys	Glu	225	230	235	240
Lys	Gln	Ala	Arg	Lys	Phe	Val	Arg	Gln	Ile	Gly	Ser	Ala	Leu	Ser	Tyr	245	250	255	
Leu	His	Gln	Asn	Ser	Val	Val	His	Arg	Asp	Leu	Lys	Ile	Glu	Asn	Ile	260	265	270	
Leu	Ile	Ser	Lys	Thr	Gly	Asp	Ile	Lys	Ile	Ile	Asp	Phe	Gly	Leu	Ser	275	280	285	
Asn	Leu	Tyr	Arg	Arg	Gln	Ser	Arg	Leu	Arg	Thr	Phe	Cys	Gly	Ser	Leu	290	295	300	
Tyr	Phe	Ala	Ala	Pro	Glu	Leu	Leu	Asn	Ala	Gln	Pro	Tyr	Ile	Gly	Pro	305	310	315	320
Glu	Val	Asp	Val	Trp	Ser	Phe	Gly	Ile	Val	Leu	Tyr	Val	Leu	Val	Cys	325	330	335	
Gly	Lys	Val	Pro	Phe	Asp	Asp	Gln	Asn	Met	Ser	Ala	Leu	His	Ala	Lys	340	345	350	
Ile	Lys	Lys	Gly	Thr	Val	Glu	Tyr	Pro	Ser	Tyr	Leu	Ser	Ser	Asp	Cys	355	360	365	
Lys	Gly	Leu	Leu	Ser	Arg	Met	Leu	Val	Thr	Asp	Pro	Leu	Lys	Arg	Ala	370	375	380	
Thr	Leu	Glu	Glu	Val	Leu	Asn	His	Pro	Trp	Met	Ile	Arg	Asn	Tyr	Glu	385	390	395	400
Gly	Pro	Pro	Ala	Ser	Phe	Ala	Pro	Glu	Arg	Ser	Pro	Ile	Thr	Leu	Pro	405	410	415	
Leu	Asp	Pro	Glu	Ile	Ile	Arg	Glu	Met	Asn	Gly	Phe	Asp	Phe	Gly	Pro	420	425	430	
Pro	Glu	Lys	Ile	Val	Arg	Glu	Leu	Thr	Lys	Val	Ile	Ser	Ser	Glu	Ala	435	440	445	

Tyr	Gln	Ser	Leu	Ala	Lys	Thr	Gly	Phe	Tyr	Ser	Gly	Pro	Asn	Ser	Ala		
450						455					460						
Asp	Lys	Lys	Lys	Ser	Phe	Phe	Glu	Phe	Arg	Ile	Arg	His	Ala	Ala	His		
465					470					475					480		
Asp	Ile	Glu	Asn	Pro	Ile	Leu	Pro	Ser	Leu	Ser	Met	Asn	Thr	Asp	Ile		
				485					490					495			
Tyr	Asp	Ala	Phe	His	Pro	Leu	Ile	Ser	Ile	Tyr	Tyr	Leu	Val	Ser	Glu		
			500					505					510				
Arg	Arg	Val	Tyr	Glu	Lys	Gly	Gly	Asn	Trp	Asn	Arg	Ile	Ala	Lys	Thr		
		515					520					525					
Pro	Val	Ser	Ser	Val	Pro	Ser	Ser	Pro	Val	Gln	Pro	Thr	Ser	Tyr	Asn		
	530					535					540						
Arg	Thr	Leu	Pro	Pro	Met	Pro	Glu	Val	Val	Ala	Tyr	Lys	Gly	Asp	Glu		
545					550					555					560		
Glu	Ser	Pro	Arg	Val	Ser	Arg	Asn	Thr	Ser	Leu	Ala	Arg	Arg	Lys	Pro		
				565					570					575			
Leu	Pro	Asp	Thr	Glu	Ser	His	Ser	Pro	Ser	Pro	Ser	Ala	Thr	Ser	Ser		
			580					585					590				
Ile	Lys	Lys	Asn	Pro	Ser	Ser	Ile	Phe	Arg	Arg	Phe	Ser	Ser	Arg	Arg		
	595						600					605					
Lys	Gln	Asn	Lys	Ser	Ser	Thr	Ser	Thr	Leu	Gln	Ile	Ser	Ala	Pro	Leu		
	610					615					620						
Glu	Thr	Ser	Gln	Ser	Pro	Pro	Thr	Pro	Arg	Thr	Lys	Pro	Ser	His	Lys		
625					630					635					640		
Pro	Pro	Val	Ser	Tyr	Lys	Asn	Lys	Leu	Val	Thr	Gln	Ser	Ala	Ile	Gly		
				645				650						655			
Arg	Ser	Thr	Ser	Val	Arg	Glu	Gly	Arg	Tyr	Ala	Gly	Ile	Ser	Ser	Gln		
			660					665					670				
Met	Asp	Ser	Leu	Asn	Met	Asp	Ser	Thr	Gly	Pro	Ser	Ala	Ser	Asn	Met		
	675						680					685					
Ala	Asn	Ala	Pro	Pro	Ser	Val	Arg	Asn	Asn	Arg	Val	Leu	Asn	Pro	Arg		
	690					695					700						
Gly	Ala	Ser	Leu	Gly	His	Gly	Arg	Met	Ser	Thr	Ser	Thr	Thr	Asn	Arg		
705					710					715					720		
Gln	Lys	Gln	Ile	Leu	Asn	Glu	Thr	Met	Gly	Asn	Pro	Val	Asp	Lys	Asn		
				725					730					735			
Ser	Thr	Ser	Pro	Ser	Lys	Ser	Thr	Asp	Lys	Leu	Asp	Pro	Ile	Lys	Pro		
			740					745					750				

Val Phe Leu Lys Gly Leu Phe Ser Val Ser Thr Thr Ser Thr Lys Ser
 755 760 765
 Thr Glu Ser Ile Gln Arg Asp Leu Ile Arg Val Met Gly Met Leu Asp
 770 775 780
 Ile Glu Tyr Lys Glu Ile Lys Gly Gly Tyr Ala Cys Leu Tyr Lys Pro
 785 790 795 800
 Gln Gly Ile Arg Thr Pro Thr Lys Ser Thr Ser Val His Thr Arg Arg
 805 810 815
 Lys Pro Ser Tyr Gly Ser Asn Ser Thr Thr Asp Ser Tyr Gly Ser Val
 820 825 830
 Pro Asp Thr Val Pro Leu Asp Asp Asn Gly Glu Ser Pro Ala Ser Asn
 835 840 845
 Leu Ala Phe Glu Ile Tyr Ile Val Lys Val Pro Ile Leu Ser Leu Arg
 850 855 860
 Gly Val Ser Phe His Arg Ile Ser Gly Asn Ser Trp Gln Tyr Lys Thr
 865 870 875 880
 Leu Ala Ser Arg Ile Leu Asn Glu Leu Lys Leu
 885 890

<210> 5

<211> 1212

<212> PRT

<213> Candida albicans

<400> 5

Met Asn Asn Gln Asp Pro Asp Ser Gln Tyr His Asn Lys Lys Val Tyr
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 Pro Pro Asn Leu Pro Ser Ile Pro Pro Pro Gln Gln Pro Leu Ser
 20 25 30
 Gly Arg Pro Ala Thr Pro Arg Met Leu Arg Ser Ile Ser Gly Thr Leu
 35 40 45
 Lys Ser Lys Thr Glu Leu Ala His Ser Asp Lys Gly Gln Glu Ser Asn
 50 55 60
 Asn Glu Thr Lys Asn Ser Asn Ser Pro His Tyr Val Pro Asp Thr His
 65 70 75 80
 Thr Arg Gln Pro Pro Pro Glu Ser Leu Lys Ser Asn Ile Gln Ala Pro
 85 90 95
 Thr Ala Val His Gly Asn Gln Gln Lys Gly Ser Leu Leu Pro Pro Pro
 100 105 110
 Ser Ile Pro Asn Pro Asn Thr Met Lys Pro Ala Pro Thr Pro Thr Gly
 115 120 125

Val	Asp	Gln	Pro	Pro	Ala	Lys	Gln	Lys	Pro	Ser	Pro	Ala	Pro	Lys	Gln	130	135	140
Pro	Gln	Pro	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Phe	His	145	150	155
Arg	Lys	Ser	Ile	Gly	Asp	Trp	Asn	Phe	Val	Lys	Thr	Ile	Gly	Ala	Gly	165	170	175
Ser	Met	Gly	Lys	Val	Lys	Leu	Ala	Gln	His	Asn	Ala	Thr	His	Glu	Ile	180	185	190
Cys	Ala	Val	Lys	Ile	Ile	Pro	Arg	Ala	Ala	Lys	Leu	Tyr	Gln	Arg	Ala	195	200	205
His	Ala	Asn	Asp	Pro	Pro	Pro	Gln	Thr	Thr	Gln	Glu	Ala	Ala	Gln	Arg	210	215	220
His	Lys	Glu	Phe	Glu	Lys	Glu	Val	Ala	Arg	Asp	Arg	Arg	Thr	Ile	Arg	225	230	235
Glu	Gly	Ala	Leu	Gly	Arg	Leu	Leu	Tyr	His	Pro	Phe	Ile	Cys	Arg	Leu	245	250	255
Tyr	Glu	Met	Val	Pro	Met	Thr	Asn	His	Tyr	Tyr	Met	Leu	Phe	Glu	Tyr	260	265	270
Ile	Glu	Gly	Gly	Gln	Met	Leu	Asp	Tyr	Ile	Val	Ala	His	Gly	Ser	Leu	275	280	285
Lys	Glu	Arg	His	Ala	Arg	Lys	Phe	Ala	Arg	Gly	Ile	Ala	Ser	Ala	Leu	290	295	300
Asp	Tyr	Cys	His	Arg	Asn	Asn	Val	Val	His	Arg	Asp	Leu	Lys	Ile	Glu	305	310	315
Asn	Ile	Met	Ile	Asn	Glu	Lys	Gly	Asp	Ile	Lys	Ile	Ile	Asp	Phe	Gly	325	330	335
Leu	Ser	Asn	Leu	Tyr	Ala	Pro	Lys	Asn	Leu	Leu	Lys	Thr	Tyr	Cys	Gly	340	345	350
Ser	Leu	Tyr	Phe	Ala	Ala	Pro	Glu	Leu	Leu	Ser	Ala	Lys	Pro	Tyr	Ile	355	360	365
Gly	Pro	Glu	Val	Asp	Val	Trp	Ser	Phe	Gly	Val	Val	Leu	Tyr	Val	Leu	370	375	380
Val	Cys	Gly	Lys	Val	Pro	Phe	Asp	Asp	Gln	Ser	Val	Ser	Val	Leu	His	385	390	395
Glu	Lys	Ile	Lys	Lys	Gly	Asn	Val	Glu	Tyr	Pro	Ala	Phe	Leu	Ser	Arg	405	410	415
Glu	Cys	Val	Ser	Leu	Leu	Ser	Arg	Met	Leu	Val	Val	Asp	Pro	Thr	Lys	420	425	430

Arg	Ala	Ser	Leu	Tyr	Glu	Val	Cys	Ser	His	Pro	Trp	Met	Asn	Lys	Gly
		435					440					445			
Tyr	Asp	Tyr	Lys	Val	Asn	Asn	Tyr	Leu	Pro	Arg	Arg	Glu	Pro	Leu	Arg
	450					455					460				
Leu	Pro	Leu	Asp	Pro	Glu	Ile	Ile	Lys	Thr	Ile	Ala	Asn	Phe	Glu	Leu
465					470					475					480
Gly	Thr	Val	Gln	Gly	Val	Ala	Asp	Glu	Leu	Thr	Ser	Ile	Leu	Thr	Ser
				485					490					495	
Val	Glu	Tyr	Gln	Met	Ser	Cys	Glu	Asn	Trp	Tyr	Lys	Ile	Thr	Glu	Thr
			500					505					510		
Gly	Arg	Glu	Tyr	Ala	Ser	Ser	Gln	Asn	Ala	Gln	Ile	Leu	Pro	Asp	Pro
		515					520					525			
Thr	Gly	Gly	Phe	His	Pro	Leu	Val	Ser	Ile	Tyr	Tyr	Leu	Val	Asp	Glu
	530					535					540				
Met	Arg	Lys	Arg	Lys	Lys	Ala	Lys	Glu	Glu	Ala	Leu	Lys	Ala	Gln	Arg
545					550					555					560
Arg	Ala	Gln	Val	Pro	Thr	Ile	Ala	Val	Pro	Thr	Pro	Lys	Gln	Gln	Gln
				565					570					575	
Gln	Gln	Gln	Pro	Gln	Pro	Ala	Gln	Pro	Gln	Pro	Gln	Pro	Gln	Pro	Glu
			580					585					590		
Val	Ser	Gln	Pro	Leu	Pro	Glu	Pro	Lys	Pro	Val	Pro	Pro	Glu	Glu	Ile
		595					600					605			
Ile	Asn	Pro	Ala	Val	Ala	Thr	Gln	Ala	Gln	Ala	Asn	Met	Thr	Ala	Pro
	610					615					620				
Lys	Ile	Val	Glu	Thr	Phe	Ser	Glu	Thr	Pro	Gln	Arg	Thr	Leu	Asp	Pro
625					630					635					640
Ser	Lys	Gln	Ser	Val	Asp	Glu	Lys	Pro	Ser	Ala	Pro	Gly	Pro	Ser	Ile
				645					650					655	
Ala	Val	Pro	Glu	Gln	Ala	His	Thr	Thr	Ser	Val	Pro	Ser	Ser	Phe	Val
			660					665					670		
Lys	Thr	Gln	Thr	Ser	Ile	Asp	Glu	Asp	Gln	Leu	Ser	Ile	Pro	Glu	Gln
		675					680					685			
Gln	Ser	Pro	Arg	Thr	Ser	Thr	Pro	Gln	Thr	Leu	Asp	Pro	Ala	Lys	Val
	690					695					700				
Val	Gly	Gly	Ser	Ser	Gly	Ser	Ala	Ile	Ser	Ala	Pro	Asn	Ala	Gly	Ser
705					710					715					720
Gly	Ala	Gly	Phe	Asn	Ser	Leu	Leu	Arg	Arg	Leu	Ser	Ser	Lys	Lys	Tyr
				725					730					735	

Lys	Gly	Ala	Ser	Ser	Pro	Lys	Arg	Ser	Thr	Ser	Pro	Ser	Pro	Asn	Val	740	745	750
Glu	Gly	Leu	Ser	Pro	Gln	Pro	Thr	Lys	Ala	Asp	Pro	Met	Val	Arg	Arg	755	760	765
Gly	Val	Ser	Met	Lys	Val	Thr	Ala	Lys	Glu	Lys	Gln	Thr	Asn	Thr	Arg	770	775	780
Pro	Pro	Lys	Ser	Glu	Leu	Ile	Lys	Lys	Lys	Pro	Gln	His	Gly	Arg	Ser	785	790	795
Ser	Ser	Thr	Ser	Asn	Lys	Met	Gln	Gly	Phe	Ile	Pro	Val	Glu	Tyr	Leu	805	810	815
Pro	Pro	Leu	Pro	Thr	Ile	Asp	Thr	Asn	Thr	Asn	Thr	Ile	Val	Ser	Asp	820	825	830
Gly	Ala	Lys	Gln	Gln	Asn	Leu	Thr	Val	Pro	Ser	Thr	Ala	Arg	His	Met	835	840	845
His	Pro	Thr	Ala	Arg	Ala	Lys	Ser	Val	Gly	Gly	Gly	His	Met	Arg	Lys	850	855	860
Asp	Ser	Tyr	Gly	Arg	Val	Ser	His	Gly	Ser	Gln	Asn	Pro	Leu	Pro	Pro	865	870	875
Leu	Pro	Thr	Ser	Met	Ala	Ser	Gln	Asn	Ser	Gln	Glu	Val	Val	Gly	Lys	885	890	895
Asp	Thr	Ser	Glu	Gly	Phe	Phe	Asp	Asp	Val	Gln	Leu	Asp	Asp	Val	Gly	900	905	910
Tyr	Gln	Glu	Val	Pro	Gln	Leu	Thr	Glu	Ser	Glu	Ile	Ile	Glu	Gln	Tyr	915	920	925
Asn	Ile	Ser	Lys	Pro	Asn	Ser	Met	Pro	Ser	Ile	Glu	His	Cys	Lys	Thr	930	935	940
Leu	Phe	Leu	Lys	Gly	Phe	Phe	Ser	Val	Gln	Thr	Thr	Ser	Ala	Lys	Pro	945	950	955
Leu	Pro	Val	Ile	Arg	Tyr	Asn	Ile	Ile	Asn	Val	Leu	Ser	Lys	Leu	Gly	965	970	975
Val	Lys	Phe	Gln	Glu	Val	Lys	Gly	Gly	Phe	Val	Cys	Met	His	Thr	Pro	980	985	990
Ser	Val	Gln	Pro	Ser	His	Ser	Asn	Glu	Leu	Asp	Glu	Glu	Asn	Lys	Leu	995	1000	1005
Tyr	Gly	Asp	Ala	Phe	Lys	Ser	Lys	Ser	Ser	Asp	Ser	Phe	Glu	Ala	Ala	1010	1015	1020
Glu	Pro	Glu	Gly	Ser	Lys	Thr	Pro	Ser	Arg	Gln	Pro	Ser	Leu	Gln	Leu	1025	1030	1035
																		1040

Pro Ser His Thr Pro Thr Thr Pro Ser Gly Pro Lys Ser His Lys Ser
 1045 1050 1055
 Ser Asn Ser Ile Gly Ser Ile Gly Gly Asn Val Pro Arg Arg Lys Phe
 1060 1065 1070
 Ser Ile Gly Asn Ala Phe Asn Thr Tyr Arg Lys Lys Asn Gly Ser Gln
 1075 1080 1085
 Val Met Met Pro Pro Asn Thr Pro Ala Thr Ala Lys Val Ile His Gly
 1090 1095 1100
 Leu Tyr Asp Asp Asp Lys Glu Arg Asn Gly Glu Asp Asp Asp Asp
 1105 1110 1115 1120
 Glu Asp Asp Tyr Gly Tyr Asp Asp Ser Ala Asp Ser Leu Asn Gly Tyr
 1125 1130 1135
 Gly Gly Gly Ser Asp Met Leu Ile Ser Ser Arg Ile Glu Gln Arg Ala
 1140 1145 1150
 Lys His Gln Arg Thr Val Ser Ser Ser Ser Gln Lys Ala Ser Lys Ser
 1155 1160 1165
 Pro Leu Lys Phe Glu Ile His Ile Val Lys Val Pro Leu Val Gly Leu
 1170 1175 1180
 Tyr Gly Val Gln Phe Lys Lys Ile Leu Gly Asn Thr Trp Asn Tyr Lys
 1185 1190 1195 1200
 Thr Leu Ala Ser Gln Ile Leu Asn Glu Met Asn Leu
 1205 1210

<210> 6

<211> 800

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 6

Met Ala Ser Val Pro Lys Arg His Thr Tyr Gly Gly Asn Val Val Thr
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 Asp Arg Asp Arg His Ser Leu Gln Arg Asn Asn Glu Ile Leu His Pro
 20 25 30
 Ile His Lys Asn Gln Arg Lys His Ala Thr Phe Gly Pro Tyr Ile Ile
 35 40 45
 Gly Ser Thr Leu Gly Glu Gly Glu Phe Gly Lys Val Lys Leu Gly Trp
 50 55 60
 Thr Lys Ala Ser Ser Ser Asn Glu Val Pro Lys Gln Val Ala Ile Lys
 65 70 75 80
 Leu Ile Arg Arg Asp Thr Ile Lys Lys Asp Ala Asp Lys Glu Ile Lys
 85 90 95

Ile	Tyr	Arg	Glu	Ile	Asn	Ala	Leu	Lys	His	Leu	Thr	His	Pro	Asn	Ile	100	105	110
Ile	Tyr	Leu	Glu	Glu	Val	Leu	Gln	Asn	Ser	Lys	Tyr	Ile	Gly	Ile	Val	115	120	125
Leu	Glu	Phe	Val	Ser	Gly	Gly	Glu	Phe	Tyr	Lys	Tyr	Ile	Gln	Arg	Lys	130	135	140
Arg	Arg	Leu	Lys	Glu	Ser	Ser	Ala	Cys	Arg	Leu	Phe	Ala	Gln	Leu	Ile	145	150	155
Ser	Gly	Val	Asn	Tyr	Met	His	Tyr	Lys	Gly	Leu	Val	His	Arg	Asp	Leu	165	170	175
Lys	Leu	Glu	Asn	Leu	Leu	Leu	Asp	Lys	His	Glu	Asn	Leu	Val	Ile	Thr	180	185	190
Asp	Phe	Gly	Phe	Val	Asn	Glu	Phe	Phe	Glu	Asp	Asn	Glu	Leu	Met	Lys	195	200	205
Thr	Ser	Cys	Gly	Ser	Pro	Cys	Tyr	Ala	Ala	Pro	Glu	Leu	Val	Val	Ser	210	215	220
Thr	Lys	Ala	Tyr	Glu	Ala	Arg	Lys	Ala	Asp	Val	Trp	Ser	Cys	Gly	Val	225	230	235
Ile	Leu	Tyr	Ala	Met	Leu	Ala	Gly	Tyr	Leu	Pro	Trp	Asp	Asp	Asp	His	245	250	255
Glu	Asn	Pro	Thr	Gly	Asp	Asp	Ile	Ala	Arg	Leu	Tyr	Lys	Tyr	Ile	Thr	260	265	270
Gln	Thr	Pro	Leu	Lys	Phe	Pro	Glu	Tyr	Ile	Thr	Pro	Ile	Pro	Arg	Asp	275	280	285
Leu	Leu	Arg	Arg	Ile	Leu	Val	Pro	Asn	Pro	Arg	Arg	Arg	Ile	Asn	Leu	290	295	300
Gln	Thr	Ile	Lys	Arg	His	Val	Trp	Leu	Lys	Pro	His	Glu	Ala	Phe	Leu	305	310	315
Ser	Ile	Gln	Pro	Asn	Tyr	Trp	Asp	Glu	His	Leu	Gln	Lys	Glu	Arg	Pro	325	330	335
Lys	Pro	Pro	Asn	Lys	Gly	Asp	Val	Gly	Arg	His	Ser	Thr	Tyr	Ser	Ser	340	345	350
Ser	Ala	Ser	Ser	Tyr	Ser	Lys	Ser	Arg	Asp	Arg	Asn	Ser	Leu	Ile	Ile	355	360	365
Glu	Ser	Thr	Leu	Glu	Gln	His	Arg	Met	Ser	Pro	Gln	Leu	Ala	Thr	Ser	370	375	380
Arg	Pro	Ala	Ser	Pro	Thr	Phe	Ser	Thr	Gly	Ser	Lys	Val	Val	Leu	Asn	385	390	395
																		400

Asp	Thr	Lys	Asn	Asp	Met	Lys	Glu	Ser	Asn	Ile	Asn	Gly	Glu	Arg	Thr	405	410	415	
Ser	Ala	Ser	Cys	Arg	Tyr	Thr	Arg	Asp	Ser	Lys	Gly	Asn	Gly	Gln	Thr	420	425	430	
Gln	Ile	Glu	Gln	Val	Ser	Ala	Arg	His	Ser	Ser	Arg	Gly	Asn	Lys	His	435	440	445	
Thr	Ser	Val	Ala	Gly	Leu	Val	Thr	Ile	Pro	Gly	Ser	Pro	Thr	Thr	Ala	450	455	460	
Arg	Thr	Arg	Asn	Ala	Pro	Ser	Ser	Lys	Leu	Thr	Glu	His	Val	Lys	Asp	465	470	475	480
Ser	Ser	Gln	Thr	Ser	Phe	Thr	Gln	Glu	Glu	Phe	His	Arg	Ile	Gly	Asn	485	490	495	
Tyr	His	Val	Pro	Arg	Ser	Arg	Pro	Arg	Pro	Thr	Ser	Tyr	Tyr	Pro	Gly	500	505	510	
Leu	Ser	Arg	Asn	Thr	Ala	Asp	Asn	Ser	Leu	Ala	Asp	Ile	Pro	Val	Asn	515	520	525	
Lys	Leu	Gly	Ser	Asn	Gly	Arg	Leu	Thr	Asp	Ala	Lys	Asp	Pro	Val	Pro	530	535	540	
Leu	Asn	Ala	Ile	His	Asp	Thr	Asn	Lys	Ala	Thr	Ile	Ser	Asn	Asn	Ser	545	550	555	560
Ile	Met	Leu	Leu	Ser	Glu	Gly	Pro	Ala	Ala	Lys	Thr	Ser	Pro	Val	Asp	565	570	575	
Tyr	His	Tyr	Ala	Ile	Gly	Asp	Leu	Asn	His	Gly	Asp	Lys	Pro	Ile	Thr	580	585	590	
Glu	Val	Ile	Asp	Lys	Ile	Asn	Lys	Asp	Leu	Thr	His	Lys	Ala	Ala	Glu	595	600	605	
Asn	Gly	Phe	Pro	Arg	Glu	Ser	Ile	Asp	Pro	Glu	Ser	Thr	Ser	Thr	Ile	610	615	620	
Leu	Val	Thr	Lys	Glu	Pro	Thr	Asn	Ser	Thr	Asp	Glu	Asp	His	Val	Glu	625	630	635	640
Ser	Gln	Leu	Glu	Asn	Val	Gly	His	Ser	Ser	Asn	Lys	Ser	Asp	Ala	Ser	645	650	655	
Ser	Asp	Lys	Asp	Ser	Lys	Lys	Ile	Tyr	Glu	Lys	Lys	Arg	Phe	Ser	Phe	660	665	670	
Met	Ser	Leu	Tyr	Ser	Ser	Leu	Asn	Gly	Ser	Arg	Ser	Thr	Val	Glu	Ser	675	680	685	
Arg	Thr	Ser	Lys	Gly	Asn	Ala	Pro	Pro	Val	Ser	Ser	Arg	Asn	Pro	Ser	690	695	700	

Gly Gln Ser Asn Arg Ser Asn Ile Lys Ile Thr Gln Gln Gln Pro Arg
 705 710 715 720
 Asn Leu Ser Asp Arg Val Pro Asn Pro Asp Lys Lys Ile Asn Asp Asn
 725 730 735
 Arg Ile Arg Asp Asn Ala Pro Ser Tyr Ala Glu Ser Glu Asn Pro Gly
 740 745 750
 Arg Ser Val Arg Ala Ser Val Met Val Ser Thr Leu Arg Glu Glu Asn
 755 760 765
 Arg Ser Glu Leu Ser Asn Glu Gly Asn Asn Val Glu Ala Gln Thr Ser
 770 775 780
 Thr Ala Arg Lys Val Leu Asn Phe Phe Lys Arg Arg Ser Met Arg Val
 785 790 795 800

<210> 7

<211> 865

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 7

Met Ser Tyr Thr Asn Lys Arg His Thr Tyr Tyr Gly Gly Phe Thr Asn
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 Asp Leu Ser Asp Thr Phe Gln Tyr Pro Gln Arg Thr Asp Glu Gln Arg
 20 25 30
 Arg Lys His Val Thr Phe Gly Pro Tyr Ile Leu Gly Ser Thr Leu Gly
 35 40 45
 Glu Gly Glu Phe Gly Lys Val Lys Leu Gly Trp Pro Lys Asn Phe Ser
 50 55 60
 Asn Ser Ser Asn Ser Thr Phe Asp Phe Pro Lys Gln Val Ala Ile Lys
 65 70 75 80
 Leu Ile Lys Arg Asp Ser Ile Ser Asn Asp Tyr Arg Lys Glu Val Lys
 85 90 95
 Ile Tyr Arg Glu Ile Asn Ala Leu Lys His Leu Ser His Pro Asn Ile
 100 105 110
 Val Lys Leu Glu Glu Val Leu Gln Asn Ser Arg Tyr Ile Gly Ile Val
 115 120 125
 Leu Glu Tyr Ala Cys Gly Gly Glu Phe Tyr Lys Tyr Ile Gln Lys Lys
 130 135 140
 Arg Arg Leu Lys Glu Met Asn Ala Cys Arg Leu Phe Ser Gln Leu Ile
 145 150 155 160
 Ser Gly Val His Tyr Ile His Ser Lys Gly Leu Val His Arg Asp Leu
 165 170 175

Lys	Leu	Glu	Asn	Leu	Leu	Leu	Asp	Lys	Asn	Glu	Asn	Leu	Val	Ile	Thr	180	185	190
Asp	Phe	Gly	Phe	Val	Asn	Glu	Phe	Cys	Ser	Arg	Asn	Glu	Leu	Met	Lys	195	200	205
Thr	Ser	Cys	Gly	Ser	Pro	Cys	Tyr	Ala	Ala	Pro	Glu	Leu	Val	Ile	Ser	210	215	220
Ala	Glu	Pro	Tyr	Glu	Ala	Arg	Lys	Ala	Asp	Ile	Trp	Ser	Cys	Gly	Val	225	230	235
Ile	Leu	Tyr	Ala	Ile	Leu	Ala	Gly	Tyr	Leu	Pro	Trp	Asp	Asp	Asp	Pro	245	250	255
Asn	Asn	Pro	Glu	Gly	Ser	Asp	Ile	Gly	Arg	Leu	Tyr	Asn	Tyr	Ile	Asn	260	265	270
Ser	Thr	Pro	Leu	Lys	Phe	Pro	Asp	Tyr	Ile	Leu	Pro	Ile	Pro	Arg	Asp	275	280	285
Leu	Leu	Arg	Arg	Met	Leu	Val	Ser	Asp	Pro	Lys	Lys	Arg	Ile	Asn	Leu	290	295	300
Lys	Gln	Ile	Lys	Lys	His	Glu	Trp	Leu	Lys	Pro	His	Ser	Ser	Phe	Leu	305	310	315
Ser	Ile	Thr	Pro	Asp	Glu	Trp	Asp	Lys	Leu	Asn	Asn	Thr	Gln	Ser	Val	325	330	335
Phe	Arg	Leu	Ala	Lys	Pro	Arg	Arg	Arg	Tyr	Gly	Ser	Arg	Pro	Gln	Ser	340	345	350
Ser	Cys	Ser	Thr	Ser	Ser	Leu	Gly	Ser	Arg	Ser	Asp	Lys	Arg	Asp	Ser	355	360	365
Leu	Val	Ile	Asp	Ser	Thr	Leu	Ile	Thr	Phe	Pro	Ala	Pro	Pro	Gln	Glu	370	375	380
Ser	Gln	Asn	His	Ile	Ile	Thr	Arg	Pro	Ala	Ser	Ile	Ala	Ser	Asp	Gln	385	390	395
Arg	Leu	Ser	Pro	Ile	Arg	Arg	Ser	Asn	Arg	His	Asn	Arg	Ser	Asn	Ser	405	410	415
Ala	Ala	Ser	Val	Ala	Leu	Gln	Ala	Val	Val	Asn	Ala	Asp	Arg	Glu	Tyr	420	425	430
Val	Leu	Ser	His	Glu	Gln	Ser	Leu	Ser	Pro	Val	Gln	Asn	Ile	Arg	Gln	435	440	445
Thr	Thr	Gly	Asn	Met	Thr	Ala	Ser	Leu	Ser	Pro	Pro	Pro	Ala	Ile	Ser	450	455	460
Pro	Gly	Asp	Ile	Ile	Ile	Glu	Thr	Thr	Pro	Ile	Lys	Arg	Asn	Thr	Ile	465	470	475
																		480

Ser	Gly	Ser	Ser	Ile	Val	Pro	Ser	Leu	Glu	Glu	Glu	Ser	Ser	Thr	Thr	485	490	495
Met	Gln	Thr	Ser	Lys	Ile	Gln	Pro	Asn	Asn	Met	Ala	Ser	Ser	Gln	Asn	500	505	510
His	Gln	Tyr	Asn	Lys	Asn	Lys	Thr	Gln	Asn	Ser	Leu	Gln	Ser	Ala	Lys	515	520	525
Asn	Phe	Tyr	Arg	Thr	Ser	Ser	Ser	Ser	His	Thr	Lys	Pro	Arg	Pro	Thr	530	535	540
Ser	Tyr	His	Pro	Gly	Ser	Tyr	Thr	Thr	Pro	Pro	Tyr	Asn	Ser	Asn	Thr	545	550	555
Leu	Ser	Ile	Tyr	Glu	Ile	Asn	Glu	Lys	Ala	Lys	Ser	Ser	Ala	Ser	Ser	565	570	575
Gln	Thr	Leu	Asn	Gln	Arg	Asp	Thr	Ser	Pro	Phe	Asp	Ser	Thr	Pro	Tyr	580	585	590
Leu	Ala	Leu	Asp	Thr	Cys	Ile	Thr	Ser	Ser	Ser	Ser	Ile	Glu	Ser	Ser	595	600	605
Pro	Lys	Leu	Ile	Thr	His	Gly	Gln	Phe	Ser	Val	Ala	Lys	Pro	Ser	Val	610	615	620
Asp	Leu	Gln	Ser	Val	Ser	Gly	Asp	Leu	Ile	Lys	Tyr	Lys	Arg	Asp	Ala	625	630	635
Asp	Val	Val	Thr	Arg	Ile	Tyr	Asp	Glu	Lys	Tyr	Lys	Gln	Lys	Arg	Lys	645	650	655
Ser	Leu	Arg	Tyr	Ser	Gly	Ile	Phe	Ser	Asp	Ile	Ser	Cys	Asp	Thr	Val	660	665	670
Thr	Glu	Glu	Ser	Asp	Glu	Leu	Arg	Pro	Pro	Glu	Ser	Pro	Leu	Gln	Gln	675	680	685
His	Glu	Gly	Gln	Glu	Ser	Ile	Asp	Lys	Ala	Lys	Thr	Glu	Asp	Thr	Ser	690	695	700
Glu	Lys	Gly	Ser	Lys	Ser	Ser	Asn	Ile	Ala	Lys	Ala	Thr	Ala	Gln	Lys	705	710	715
His	Val	Asn	Asn	His	Leu	Glu	Arg	Ser	Leu	Asn	Glu	Ala	Glu	Ser	Thr	725	730	735
Lys	Lys	Arg	Phe	Ser	Phe	Leu	Ser	Leu	Tyr	Ser	Tyr	Asp	Thr	Ser	Lys	740	745	750
Ser	Ser	Leu	Tyr	Ser	Ser	Met	Asp	Ser	Lys	Arg	Lys	Pro	Ser	Pro	Pro	755	760	765
Ser	Gln	Arg	Arg	Pro	Lys	Lys	Asp	Asp	Ser	Tyr	Gln	Thr	Asn	Ser	Lys	770	775	780

Asn His Tyr Ile Thr Ala Ser Asn Met Gln Thr Ser His Gln Val Ser
 785 790 795 800
 Lys Asp Leu Pro Ala Pro Thr Met Val Gln Asn Lys Cys Thr Leu Glu
 805 810 815
 Thr Lys Lys Ala Val Arg Ser Asn Arg Ser Ser Ile Met Val Ser Glu
 820 825 830
 Val Asn Lys Ala Ser Val Asp Asn Lys Ala Ala Gln Ser Pro Glu His
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 Ser Thr Ala Lys Arg Val Leu Gly Phe Phe Lys Arg Arg Ser Met Lys
 850 855 860
 Ile
 865

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 <212> PRT
 <213> Candida albicans

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 Gly Asn Ser Cys Ile Pro Arg Thr Val Glu Met Pro Ser Leu Pro Pro
 35 40 45
 Thr Ser Thr His His Gln His Gln Gln Met Pro Ser Ser Ser Ser His
 50 55 60
 Ala His Ile Ala Lys Lys Ile His Arg Glu Val Arg Phe Gly Ala Tyr
 65 70 75 80
 Ile Leu Gly Ser Thr Leu Gly Glu Gly Glu Phe Gly Lys Val Lys Leu
 85 90 95
 Gly Trp Arg Lys Asp Gly Lys His Pro Ser Gln Val Ala Ile Lys Leu
 100 105 110
 Ile Lys Arg Ser Thr Ile Thr Lys Asp Ser Asp Ser Glu Ile Lys Ile
 115 120 125
 His Arg Glu Ile Asn Ser Leu Lys Leu Leu Asn His Pro Asn Ile Val
 130 135 140
 Asn Leu Val Glu Val Met Lys Ser Gly Lys Tyr Ile Gly Ile Val Leu
 145 150 155 160
 Glu Tyr Ala Ser Gly Gly Glu Leu Phe Asp Tyr Ile Leu Gln His Lys
 165 170 175

Tyr Leu Lys Glu Asn Val Ala Lys Lys Leu Phe Ala Gln Leu Val Ser
 180 185 190
 Gly Val Asp Tyr Met His Ala Lys Gly Leu Ile His Arg Asp Leu Lys
 195 200 205
 Leu Glu Asn Leu Leu Leu Asp Lys His Arg Asn Val Ile Ile Ser Asp
 210 215 220
 Phe Gly Phe Val Asn Ser Tyr Asn Arg Asp Lys Asn Asp Leu Met Lys
 225 230 235 240
 Thr Ser Cys Gly Ser Pro Cys Tyr Ala Ala Pro Glu Leu Val Leu Ser
 245 250 255
 Gln Thr Ala Tyr Glu Gly Arg Lys Val Asp Ile Trp Ser Leu Gly Val
 260 265 270
 Ile Leu Tyr Ala Met Leu Ala Gly Tyr Leu Pro Phe Asp Asp Asp Pro
 275 280 285
 Glu Asn Glu Asp Gly Ser Asp Ile Ile Lys Leu Tyr His Tyr Ile Cys
 290 295 300
 Lys Thr Pro Leu Thr Phe Pro Glu Tyr Val Ser Pro Leu Ala Arg Asp
 305 310 315 320
 Leu Leu Arg Lys Ile Ile Val Ser Asp Pro Lys Lys Arg Ile Ser Ile
 325 330 335
 Asp Asp Ile Arg Asn His Pro Trp Leu Ser Ser His Ala Asn Leu Leu
 340 345 350
 Ser Ile Arg Gln Pro Glu Trp Asp Lys Val His Ser Glu Lys Gln Gln
 355 360 365
 Pro Ile Ala Val Glu Pro Pro Gln Pro Asn Lys Arg Tyr Ser Met Ile
 370 375 380
 Asn Glu Arg Thr Asn Ser Ser Ser Leu Met Ser Pro Ala Pro Arg Val
 385 390 395 400
 Thr His Thr Gln Pro Leu Ser Ser His Ala Arg Ser Tyr Ser Ser Thr
 405 410 415
 Ser Ile Ser Leu Leu Tyr Ser Ser Pro Ser Ala Thr Pro Ser Met Ala
 420 425 430
 Asn Ala Val Thr Asn Gly Glu Gly Ala Thr Thr Thr Thr Thr Asn Gly
 435 440 445
 Ser Ile Asn Glu Ser Asn Asp Thr Leu Gln Leu Ser Gly Thr Pro Ser
 450 455 460
 Pro Lys Lys Pro Ser Thr Val Ser Pro Val Arg Gly His Gln Lys Ser
 465 470 475 480

Ala	Ser	Ile	Ser	Asn	Ser	Tyr	Ser	Ser	Ala	Ser	Ile	Ala	Leu	Lys	Ala	485	490	495
Val	Val	His	Glu	Glu	Asn	Arg	Leu	His	Asn	His	Gln	Gln	Ser	Gln	Gln	500	505	510
Tyr	Ile	Pro	Arg	Ser	Ser	Thr	Ile	Ser	Thr	Ile	Val	Glu	Ser	Pro	Thr	515	520	525
Lys	Ala	Asn	Thr	Ala	Thr	Glu	Thr	Glu	Thr	Thr	Asp	Gly	His	Lys	Ile	530	535	540
Leu	Leu	Pro	Pro	Pro	Ser	Lys	Asp	Ala	Gln	Lys	Leu	Pro	His	Ala	Ala	545	550	555
Lys	Lys	Pro	Arg	Pro	Thr	Ser	Tyr	His	Pro	Ser	Ser	Met	Ser	Ser	Ala	565	570	575
Leu	Ile	His	Asn	Asn	Gln	Asn	Pro	Thr	Asp	Val	Leu	Lys	Met	Pro	Ser	580	585	590
Pro	Ile	Asn	Phe	Pro	Met	Thr	Gln	Phe	Ile	Ser	Thr	Ser	Pro	Pro	Lys	595	600	605
Ser	Asn	Gly	Ser	Leu	Asn	Asp	Ser	Gly	Asn	Phe	Thr	Asn	Cys	Ser	Pro	610	615	620
Lys	Ala	Thr	Ser	Arg	Arg	Asn	Ser	Val	Val	Thr	His	Val	His	Val	Asn	625	630	635
Gly	Val	Leu	Ser	Lys	Glu	Asn	Leu	Ile	His	Ser	Ser	Ser	Ser	Pro	Asp	645	650	655
Asn	Lys	Arg	Asn	Ser	Val	Leu	Ser	Tyr	Leu	Glu	Asp	Lys	Ile	Asp	Thr	660	665	670
Leu	Glu	Leu	Thr	Glu	Ser	His	Ser	Pro	Ser	Lys	Asn	Thr	Phe	Glu	Glu	675	680	685
Ile	Val	Asp	Ala	Ala	Ile	Ala	Thr	Pro	Glu	Ile	Asn	Gln	Val	Pro	Val	690	695	700
Phe	Asp	Ser	Gln	Thr	Ser	Pro	Asn	Gly	Ile	Gly	Leu	Asp	Ile	Lys	His	705	710	715
Lys	Glu	Phe	Asp	Glu	Thr	Ser	Leu	Val	Val	Glu	Lys	Lys	Ser	Lys	Glu	725	730	735
Thr	Val	Ser	Asp	Ser	Lys	Ser	Glu	Glu	Ser	Thr	Lys	Glu	Thr	Gln	Gln	740	745	750
Gln	Glu	Asn	Val	Val	Met	Tyr	Glu	Pro	Ile	Val	Pro	Val	Glu	Glu	Tyr	755	760	765
Ile	Lys	Lys	Pro	Glu	Glu	Val	Asn	Ser	Val	Glu	Ala	Lys	Gln	Pro	Glu	770	775	780

Glu Val Lys Ser Glu Asp Lys Ser Leu Gln Gly Gln Lys Ser Gln Gln
 785 790 795 800
 Gln Gln Gln Gln Pro Glu Lys His Ser Ala Asp Ile Gly Lys Thr Lys
 805 810 815
 Val Asp Leu Lys Lys Ser Ala Ser Gln Lys Lys Lys Val Lys Glu Glu
 820 825 830
 Ser Ile Lys Lys Gln Lys Asp Val Asp Ser Lys Pro Ile Glu Arg Arg
 835 840 845
 His Thr Ile Ala Ala Arg Arg His His Asn Asp Glu Asn Lys Glu Asn
 850 855 860
 Lys Asp Val Lys Lys Arg Asn Arg Phe Ser Leu Leu Ser Phe Tyr Ser
 865 870 875 880
 Ser Tyr Asn Ser Ser Asn Ser Asn Val Ser Leu Ala Thr Ser Lys Val
 885 890 895
 Pro Ser Asn Ser Glu Asn Asn Thr Thr Val Leu Lys Pro Thr Ser Met
 900 905 910
 Asn Thr Thr Arg Lys Val Leu Glu Pro Ser Asn Glu Thr Asn Ile Met
 915 920 925
 Arg Lys Glu Thr Lys Gln Thr Asn Ser Asn Gly Ser Thr Thr Ser Lys
 930 935 940
 Ser Thr Thr Ser Ser Ser Ser Ser Ser Ala Pro Ala Ala Ser Ser Ser
 945 950 955 960
 Ser Ser Ser Ser Thr Ser Lys Arg Ala Ser Thr Ala Thr Lys Glu Thr
 965 970 975
 Ser Ala Ala Arg Lys Val Met Asp Phe Phe Lys Arg Arg Ser Val Arg
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 Val Gly

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 <213> Schizosaccharomyces pombe

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 Met Asn Ala Gln Pro Phe His Asn Asn Thr Ser Asp Val Gln Ser Phe
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 Gln Asp Ile Ile Ser Asn Ser Tyr Gln Lys Pro Leu Ser Leu Val Asp
 20 25 30
 Ser Thr Asp Arg Ala Leu Pro Asp Ser Ser Leu Ser Ser Leu Ser Arg
 35 40 45

Ser	Thr	Phe	Gln	Phe	His	Lys	His	His	Leu	Ser	Gly	Asn	Glu	Asn	Pro	50	55	60
Gln	Pro	Ser	Ser	Glu	Ser	Pro	Tyr	Phe	Thr	Asn	Asn	Glu	Arg	Leu	Asn	65	70	75
Ser	Ser	Ser	Phe	Pro	Gln	Ile	His	Asp	Asn	Gln	Leu	Ser	Pro	Ser	Phe	85	90	95
Asn	Thr	Ser	Tyr	Gln	Ala	Ile	Pro	Ser	Ser	Ser	Ser	Asn	Arg	Ser	Arg	100	105	110
Gly	Gly	Pro	Tyr	Thr	Pro	Ser	Ile	Arg	Asp	Asp	Ser	Leu	Leu	Ala	Leu	115	120	125
Leu	Ser	Phe	Ser	Ser	Asn	His	Arg	Leu	His	Ser	Met	Pro	Ser	Gln	Leu	130	135	140
Gln	Pro	Phe	Asn	Asn	Ala	Ser	Ser	Tyr	Thr	Thr	Pro	Met	Ala	Pro	Phe	145	150	155
Thr	Ala	Ser	Phe	Ser	Asn	Lys	Val	Ser	His	Ser	Ala	Tyr	Pro	Thr	Arg	165	170	175
Arg	Leu	Pro	Ser	Gln	Ala	Lys	Lys	Thr	Ser	Ala	Ile	Glu	Arg	Val	Pro	180	185	190
Val	Asn	Leu	Asn	Phe	Leu	Gln	Ser	Asp	Asn	Leu	Val	Val	Gln	Ser	Ser	195	200	205
Pro	Gln	Thr	Asn	Phe	Glu	Asn	Phe	Glu	Phe	Pro	Lys	Lys	Ile	Pro	Ser	210	215	220
Lys	Glu	Asp	Leu	Glu	Thr	Arg	Glu	Val	Leu	Leu	Leu	Pro	Pro	Gln	Thr	225	230	235
Ser	Lys	Leu	Ser	Asn	Lys	Asn	Leu	Asp	Thr	Lys	Ser	Phe	Thr	Asp	Val	245	250	255
Asn	Lys	Ile	Ser	Gln	Gln	Gly	Phe	Val	Glu	Ile	Ser	Ser	Asn	Ser	Ser	260	265	270
Lys	Val	Thr	Pro	Asn	Thr	Ser	Leu	His	Gln	Ser	Phe	Gly	Ile	Ala	Ser	275	280	285
Ser	Ser	Ser	Asn	Asn	Tyr	Met	Gln	Thr	Ser	Ser	Glu	Leu	Thr	Ser	Ser	290	295	300
Thr	Glu	Lys	Met	Asn	Gly	Ser	His	Pro	Leu	Gln	Leu	Ser	Asn	Lys	Ser	305	310	315
Leu	Leu	Ser	Ile	His	Leu	Met	Gln	Ser	Lys	Asn	Gln	Gly	His	Val	Ser	325	330	335
Met	Thr	Gly	Ser	Asp	Lys	Leu	Ser	Ser	His	Val	Gln	Ser	Glu	Thr	Glu	340	345	350

Asn Ala Pro Val Ser Lys Pro Ser Lys Pro Asn Thr Leu Thr Glu Asp
 355 360 365
 Glu Lys Pro Leu Gln Ser Thr Lys Leu Pro Gly Asn Ser Leu Thr Val
 370 375 380
 Gly Glu Leu Tyr Gln Glu Pro Lys Ser Ile Gln Leu Pro Glu Leu Ser
 385 390 395 400
 Val Ser Arg Thr Thr Tyr Ser Ala Gln Ser Ser Ser Val Lys Asn Cys
 405 410 415
 Asn Glu Arg Ile Pro Ser Ala Lys Ala Leu Lys Lys Gln Lys His Leu
 420 425 430
 Val Pro Glu Asn Lys Ser Lys Leu Gln Tyr Val Trp Gln Lys Lys Glu
 435 440 445
 Ser Leu Pro Tyr Ala Asn Leu Thr Ser Ala Ser Asn Thr His Phe Phe
 450 455 460
 Leu Ser Glu Asn Gln Asn Asp Thr Ser Glu Arg Leu Thr Arg Thr Leu
 465 470 475 480
 Arg Lys Ser Thr Lys Asn Tyr Thr Phe Gly Ser Tyr Ile Leu Gly Arg
 485 490 495
 Thr Ile Gly Thr Gly Glu Phe Gly Lys Val Lys Leu Gly Trp Pro Leu
 500 505 510
 Pro Lys Ala Asn Ser Thr Ile His Arg Ser Thr Pro Gln Val Val Ile
 515 520 525
 Lys Ile Val Leu Ser Thr Lys Gln Asn Cys Gln Thr Ser Arg Leu Met
 530 535 540
 Arg Glu Val Ala Ile Leu Lys Gly Leu Gly Asn Asn His Pro His Ile
 545 550 555 560
 Val Lys Tyr Leu Asp Phe Val Lys Thr Lys His His Phe Gly Ile Val
 565 570 575
 Leu Asp Tyr Val Asn Gly Gly Glu Leu Phe Asp Tyr Ile Leu Ala Arg
 580 585 590
 Arg Arg Leu Glu Asp Ser Val Ala Cys Arg Leu Phe Ala Gln Leu Ile
 595 600 605
 Ser Gly Val Ala Tyr Leu His Ser Arg Gly Val Val His Arg Asp Pro
 610 615 620
 Tyr Ser Glu Ser Tyr
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<210> 10
 <211> 1142

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 10

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Met Ala Ile Asn Gly Asn Ser Ile Pro Ala Ile Lys Asp Asn Thr Ile
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Gly Pro Trp Lys Leu Gly Glu Thr Leu Gly Leu Gly Ser Thr Gly Lys
          20           25           30

Val Gln Leu Ala Arg Asn Gly Ser Thr Gly Gln Glu Ala Ala Val Lys
          35           40           45

Val Ile Ser Lys Ala Val Phe Asn Thr Gly Asn Val Ser Gly Thr Ser
  50           55           60

Ile Val Gly Ser Thr Thr Pro Asp Ala Leu Pro Tyr Gly Ile Glu Arg
  65           70           75           80

Glu Ile Ile Ile Met Lys Leu Leu Asn His Pro Asn Val Leu Arg Leu
          85           90           95

Tyr Asp Val Trp Glu Thr Asn Thr Asp Leu Tyr Leu Val Leu Glu Tyr
          100          105          110

Ala Glu Lys Gly Glu Leu Phe Asn Leu Leu Val Glu Arg Gly Pro Leu
          115          120          125

Pro Glu His Glu Ala Ile Arg Phe Phe Arg Gln Ile Ile Ile Gly Val
          130          135          140

Ser Tyr Cys His Ala Leu Gly Ile Val His Arg Asp Leu Lys Pro Glu
          145          150          155          160

Asn Leu Leu Leu Asp His Lys Tyr Asn Ile Lys Ile Ala Asp Phe Gly
          165          170          175

Met Ala Ala Leu Glu Thr Glu Gly Lys Leu Leu Glu Thr Ser Cys Gly
          180          185          190

Ser Pro His Tyr Ala Ala Pro Glu Ile Val Ser Gly Ile Pro Tyr Gln
          195          200          205

Gly Phe Ala Ser Asp Val Trp Ser Cys Gly Val Ile Leu Phe Ala Leu
          210          215          220

Leu Thr Gly Arg Leu Pro Phe Asp Glu Glu Asp Gly Asn Ile Arg Thr
          225          230          235          240

Leu Leu Leu Lys Val Gln Lys Gly Glu Phe Glu Met Pro Ser Asp Asp
          245          250          255

Glu Ile Ser Arg Glu Ala Gln Asp Leu Ile Arg Lys Ile Leu Thr Val
          260          265          270

Asp Pro Glu Arg Arg Ile Lys Thr Arg Asp Ile Leu Lys His Pro Leu
          275          280          285

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Leu	Gln	Lys	Tyr	Pro	Ser	Ile	Arg	Asp	Ser	Lys	Ser	Ile	Arg	Gly	Leu	290	295	300
Pro	Arg	Glu	Asp	Thr	Tyr	Leu	Thr	Pro	Leu	Ser	Glu	Ser	Asn	Ser	Ser	305	310	315
Ile	Asp	Ala	Thr	Ile	Leu	Gln	Asn	Leu	Val	Ile	Leu	Trp	His	Gly	Arg	325	330	335
Asp	Pro	Glu	Gly	Ile	Lys	Glu	Lys	Leu	Arg	Glu	Pro	Gly	Ala	Asn	Ala	340	345	350
Glu	Lys	Thr	Leu	Tyr	Ala	Leu	Leu	Tyr	Arg	Phe	Lys	Cys	Asp	Thr	Gln	355	360	365
Lys	Glu	Leu	Ile	Lys	Gln	Gln	Gln	Val	Lys	Lys	Arg	Gln	Ser	Ile	Ser	370	375	380
Ser	Val	Ser	Val	Ser	Pro	Ser	Lys	Lys	Val	Ser	Thr	Thr	Pro	Gln	Arg	385	390	395
Arg	Arg	Asn	Arg	Glu	Ser	Leu	Ile	Ser	Val	Thr	Ser	Ser	Arg	Lys	Lys	405	410	415
Pro	Ile	Ser	Phe	Asn	Lys	Phe	Thr	Ala	Ser	Ser	Ala	Ser	Ser	Ser	Asn	420	425	430
Leu	Thr	Thr	Pro	Gly	Ser	Ser	Lys	Arg	Leu	Ser	Lys	Asn	Phe	Ser	Ser	435	440	445
Lys	Lys	Lys	Leu	Ser	Thr	Ile	Val	Asn	Gln	Ser	Ser	Pro	Thr	Pro	Ala	450	455	460
Ser	Arg	Asn	Lys	Arg	Ala	Ser	Val	Ile	Asn	Val	Glu	Lys	Asn	Gln	Lys	465	470	475
Arg	Ala	Ser	Ile	Phe	Ser	Thr	Thr	Lys	Lys	Asn	Lys	Arg	Ser	Ser	Arg	485	490	495
Ser	Ile	Lys	Arg	Met	Ser	Leu	Ile	Pro	Ser	Met	Lys	Arg	Glu	Ser	Val	500	505	510
Thr	Thr	Lys	Leu	Met	Ser	Thr	Tyr	Ala	Lys	Leu	Ala	Glu	Asp	Asp	Asp	515	520	525
Trp	Glu	Tyr	Ile	Glu	Lys	Glu	Thr	Lys	Arg	Thr	Ser	Ser	Asn	Phe	Ala	530	535	540
Thr	Leu	Ile	Asp	Glu	Ile	Phe	Glu	Tyr	Glu	Lys	Tyr	Glu	Gln	Ile	Arg	545	550	555
Lys	Glu	Lys	Glu	Glu	Leu	Glu	Arg	Lys	Val	Arg	Glu	Ala	Lys	Ala	Arg	565	570	575
Glu	Glu	Leu	Glu	Arg	Arg	Arg	Arg	Lys	Gln	Glu	Glu	Lys	Glu	Arg	Ala	580	585	590

Arg	Lys	Leu	Leu	Glu	Lys	Glu	Asp	Leu	Lys	Arg	Lys	Gln	Glu	Glu	Leu	595	600	605	
Lys	Lys	Gln	Ile	Glu	Ile	Asp	Ile	Ser	Asp	Leu	Glu	Gln	Glu	Leu	Ser	610	615	620	
Lys	His	Lys	Glu	Glu	Lys	Leu	Asp	Gly	Asn	Ile	Arg	Ser	Ile	Ser	Ala	625	630	635	640
Pro	Met	Glu	Asn	Glu	Glu	Lys	Asn	Ile	Asn	His	Leu	Glu	Val	Asp	Ile	645	650	655	
Asp	Asn	Ile	Leu	Arg	Arg	Arg	Asn	Phe	Ser	Leu	Gln	Thr	Arg	Pro	Val	660	665	670	
Ser	Arg	Leu	Asp	Pro	Gly	Ile	Met	Phe	Ser	Ser	Pro	Thr	Glu	Glu	Val	675	680	685	
Ser	Pro	Val	Glu	Pro	Lys	Arg	Thr	Glu	Asn	Glu	Arg	Leu	Thr	Thr	Glu	690	695	700	
Lys	Lys	Ile	Leu	Glu	Thr	Ile	Arg	Arg	Ser	Lys	Phe	Leu	Gly	Ser	Ser	705	710	715	720
Phe	Asn	Ile	Asp	Lys	Glu	Leu	Lys	Leu	Ser	Lys	Met	Glu	Tyr	Pro	Ser	725	730	735	
Ile	Ile	Ala	Pro	Gln	Arg	Leu	Ser	Glu	Glu	Arg	Val	Val	Ser	Asp	Ser	740	745	750	
Asn	Asp	Gly	Tyr	Glu	Ser	Leu	Ile	Leu	Pro	Lys	Asp	Gly	Asn	Gly	Val	755	760	765	
Ser	Gln	Leu	Lys	Asp	Ser	Thr	Ala	Thr	Thr	Ala	Pro	Val	Ser	Asp	Gly	770	775	780	
Arg	Leu	Arg	Lys	Ile	Ser	Glu	Ile	Arg	Val	Pro	Gln	Phe	Thr	Arg	Lys	785	790	795	800
Ser	Arg	His	Phe	Ser	Glu	Ser	Asn	Lys	Arg	Leu	Ser	Val	Leu	Ser	Met	805	810	815	
Tyr	Ser	Thr	Lys	Glu	Ser	Phe	Thr	Asn	Leu	Val	Asp	Ile	Leu	Lys	Asn	820	825	830	
Gly	Asn	Leu	Asp	Val	Asn	Asn	Gln	Gln	Ser	Gln	Arg	Ile	Pro	Thr	Pro	835	840	845	
Arg	Ser	Ala	Asp	Asp	Ser	Glu	Phe	Leu	Phe	Glu	Thr	Val	Asn	Glu	Glu	850	855	860	
Ala	Glu	Tyr	Thr	Gly	Asn	Ser	Ser	Asn	Asp	Glu	Arg	Leu	Tyr	Asp	Val	865	870	875	880
Gly	Asp	Ser	Thr	Ile	Lys	Asp	Lys	Ser	Ala	Leu	Lys	Leu	Asn	Phe	Ala	885	890	895	

Asp Arg Phe Asn Gly Ser Asn Glu Ala Lys Gln Thr Asp Asn Leu His
 900 905 910
 Leu Pro Ile Leu Pro Pro Leu Asn Gly Asp Asn Glu Leu Arg Lys Gln
 915 920 925
 Asn Ser Gln Glu Gly Asp Gln Ala His Pro Lys Ile Lys Ser Met Ile
 930 935 940
 Pro Glu Ser Gly Ser Ser Ser His Thr Glu Lys Glu Glu Glu Asn Glu
 945 950 955 960
 Glu Lys Glu Glu Lys Lys Pro Glu Gln His Lys Gln Glu Glu Asp Gln
 965 970 975
 Glu Lys Arg Glu Lys Val Val Asp Asp Met Glu Pro Pro Leu Asn Lys
 980 985 990
 Ser Val Gln Lys Ile Arg Glu Lys Asn Ala Gly Ser Gln Ala Lys Asp
 995 1000 1005
 His Ser Lys Asp His Leu Lys Glu His Lys Gln Asp Lys Asn Thr Ala
 1010 1015 1020
 Ile Gly Asn Gly Ser Phe Phe Arg Lys Phe Ser Lys Ser Ser Asp Lys
 1025 1030 1035 1040
 Thr Met Glu Leu Tyr Ala Lys Ile Ser Ala Lys Gln Leu Phe Asn Gly
 1045 1050 1055
 Leu Glu Lys Leu Leu Arg Gly Trp Thr Gln Tyr Gly Leu Lys Asn Ile
 1060 1065 1070
 Lys Ser His Pro Asn Asn Leu Thr Leu Thr Gly Lys Leu Ser Ser Asp
 1075 1080 1085
 Asn Ile Phe Ser Leu Arg Ser Thr Leu Phe Glu Val Asn Ile Tyr Pro
 1090 1095 1100
 Arg Gly Lys Met Ser Val Val Gln Phe Lys Lys Val Ser Gly Ser Phe
 1105 1110 1115 1120
 Lys Ala Val Lys Lys Leu Val Asn Glu Val Glu Asn Val Leu Asn Lys
 1125 1130 1135
 Glu Gly Val Leu Gln Lys
 1140

<210> 11

<211> 1518

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 11

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Ser Ser Leu Ala Lys Lys Ala Ala Lys Arg Ala Met Ala Lys Val Asn
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 Ser Asn Pro Lys Arg Ala Ser Gly His Leu Glu Arg Val Val Gln Ser
 35 40 45
 Val Asn Asp Ala Thr Lys Arg Leu Ser Gln Pro Asp Ser Thr Val Ser
 50 55 60
 Val Ala Thr Lys Ser Ser Lys Arg Lys Ser Arg Asp Thr Val Gly Pro
 65 70 75 80
 Trp Lys Leu Gly Lys Thr Leu Gly Lys Gly Ser Ser Gly Arg Val Arg
 85 90 95
 Leu Ala Lys Asn Met Glu Thr Gly Gln Leu Ala Ala Ile Lys Ile Val
 100 105 110
 Pro Lys Lys Lys Ala Phe Val His Cys Ser Asn Asn Gly Thr Val Pro
 115 120 125
 Asn Ser Tyr Ser Ser Ser Met Val Thr Ser Asn Val Ser Ser Pro Ser
 130 135 140
 Ile Ala Ser Arg Glu His Ser Asn His Ser Gln Thr Asn Pro Tyr Gly
 145 150 155 160
 Ile Glu Arg Glu Ile Val Ile Met Lys Leu Ile Ser His Thr Asn Val
 165 170 175
 Met Ala Leu Phe Glu Val Trp Glu Asn Lys Ser Glu Leu Tyr Leu Val
 180 185 190
 Leu Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Tyr Leu Val Ser Lys
 195 200 205
 Gly Lys Leu Pro Glu Arg Glu Ala Ile His Tyr Phe Lys Gln Ile Val
 210 215 220
 Glu Gly Val Ser Tyr Cys His Ser Phe Asn Ile Cys His Arg Asp Leu
 225 230 235 240
 Lys Pro Glu Asn Leu Leu Leu Asp Lys Lys Asn Arg Arg Ile Lys Ile
 245 250 255
 Ala Asp Phe Gly Met Ala Ala Leu Glu Leu Pro Asn Lys Leu Leu Lys
 260 265 270
 Thr Ser Cys Gly Ser Pro His Tyr Ala Ser Pro Glu Ile Val Met Gly
 275 280 285
 Arg Pro Tyr His Gly Gly Pro Ser Asp Val Trp Ser Cys Gly Ile Val
 290 295 300
 Leu Phe Ala Leu Leu Thr Gly His Leu Pro Phe Asn Asp Asp Asn Ile
 305 310 315 320

Lys Lys Leu Leu Leu Lys Val Gln Ser Gly Lys Tyr Gln Met Pro Ser
 325 330 335
 Asn Leu Ser Ser Glu Ala Arg Asp Leu Ile Ser Lys Ile Leu Val Ile
 340 345 350
 Asp Pro Glu Lys Arg Ile Thr Thr Gln Glu Ile Leu Lys His Pro Leu
 355 360 365
 Ile Lys Lys Tyr Asp Asp Leu Pro Val Asn Lys Val Leu Arg Lys Met
 370 375 380
 Arg Lys Asp Asn Met Ala Arg Gly Lys Ser Asn Ser Asp Leu His Leu
 385 390 395 400
 Leu Asn Asn Val Ser Pro Ser Ile Val Thr Leu His Ser Lys Gly Glu
 405 410 415
 Ile Asp Glu Ser Ile Leu Arg Ser Leu Gln Ile Leu Trp His Gly Val
 420 425 430
 Ser Arg Glu Leu Ile Thr Ala Lys Leu Leu Gln Lys Pro Met Ser Glu
 435 440 445
 Glu Lys Leu Phe Tyr Ser Leu Leu Leu Gln Tyr Lys Gln Arg His Ser
 450 455 460
 Ile Ser Leu Ser Ser Ser Ser Glu Asn Lys Lys Ser Ala Thr Glu Ser
 465 470 475 480
 Ser Val Asn Glu Pro Arg Ile Glu Tyr Ala Ser Lys Thr Ala Asn Asn
 485 490 495
 Thr Gly Leu Arg Ser Glu Asn Asn Asp Val Lys Thr Leu His Ser Leu
 500 505 510
 Glu Ile His Ser Glu Asp Thr Ser Thr Val Asn Gln Asn Asn Ala Ile
 515 520 525
 Thr Gly Val Asn Thr Glu Ile Asn Ala Pro Val Leu Ala Gln Lys Ser
 530 535 540
 Gln Phe Ser Ile Asn Thr Leu Ser Gln Pro Glu Ser Asp Lys Ala Glu
 545 550 555 560
 Ala Glu Ala Val Thr Leu Pro Pro Ala Ile Pro Ile Phe Asn Ala Ser
 565 570 575
 Ser Ser Arg Ile Phe Arg Asn Ser Tyr Thr Ser Ile Ser Ser Arg Ser
 580 585 590
 Arg Arg Ser Leu Arg Leu Ser Asn Ser Arg Leu Ser Leu Ser Ala Ser
 595 600 605
 Thr Ser Arg Glu Thr Val His Asp Asn Glu Met Pro Leu Pro Gln Leu
 610 615 620

Pro	Lys	Ser	Pro	Ser	Arg	Tyr	Ser	Leu	Ser	Arg	Arg	Ala	Ile	His	Ala	
625					630					635					640	
Ser	Pro	Ser	Thr	Lys	Ser	Ile	His	Lys	Ser	Leu	Ser	Arg	Lys	Asn	Ile	
				645					650					655		
Ala	Ala	Thr	Val	Ala	Ala	Arg	Arg	Thr	Leu	Gln	Asn	Ser	Ala	Ser	Lys	
			660					665					670			
Arg	Ser	Leu	Tyr	Ser	Leu	Gln	Ser	Ile	Ser	Lys	Arg	Ser	Leu	Asn	Leu	
		675					680					685				
Asn	Asp	Leu	Leu	Val	Phe	Asp	Asp	Pro	Leu	Pro	Ser	Lys	Lys	Pro	Ala	
	690					695					700					
Ser	Glu	Asn	Val	Asn	Lys	Ser	Glu	Pro	His	Ser	Leu	Glu	Ser	Asp	Ser	
705					710					715					720	
Asp	Phe	Glu	Ile	Leu	Cys	Asp	Gln	Ile	Leu	Phe	Gly	Asn	Ala	Leu	Asp	
				725					730					735		
Arg	Ile	Leu	Glu	Glu	Glu	Glu	Asp	Asn	Glu	Lys	Glu	Arg	Asp	Thr	Gln	
			740					745						750		
Arg	Gln	Arg	Gln	Asn	Asp	Thr	Lys	Ser	Ser	Ala	Asp	Thr	Phe	Thr	Ile	
			755				760					765				
Ser	Gly	Val	Ser	Thr	Asn	Lys	Glu	Asn	Glu	Gly	Pro	Glu	Tyr	Pro	Thr	
	770					775					780					
Lys	Ile	Glu	Lys	Asn	Gln	Phe	Asn	Met	Ser	Tyr	Lys	Pro	Ser	Glu	Asn	
785					790					795					800	
Met	Ser	Gly	Leu	Ser	Ser	Phe	Pro	Ile	Phe	Glu	Lys	Glu	Asn	Thr	Leu	
				805					810					815		
Ser	Ser	Ser	Tyr	Leu	Glu	Glu	Gln	Lys	Pro	Lys	Arg	Ala	Ala	Leu	Ser	
			820					825					830			
Asp	Ile	Thr	Asn	Ser	Phe	Asn	Lys	Met	Asn	Lys	Gln	Glu	Gly	Met	Arg	
			835				840					845				
Ile	Glu	Lys	Lys	Ile	Gln	Arg	Glu	Gln	Leu	Gln	Lys	Lys	Asn	Asp	Arg	
	850					855					860					
Pro	Ser	Pro	Leu	Lys	Pro	Ile	Gln	His	Gln	Glu	Leu	Arg	Val	Asn	Ser	
865					870					875					880	
Leu	Pro	Asn	Asp	Gln	Gly	Lys	Pro	Ser	Leu	Ser	Leu	Asp	Pro	Arg	Arg	
				885					890					895		
Asn	Ile	Ser	Gln	Pro	Val	Asn	Ser	Lys	Val	Glu	Ser	Leu	Leu	Gln	Gly	
			900					905					910			
Leu	Lys	Phe	Lys	Lys	Glu	Pro	Ala	Ser	His	Trp	Thr	His	Glu	Arg	Gly	
		915					920					925				

Ser Leu Phe Met Ser Glu His Val Glu Asp Glu Lys Pro Val Lys Ala
 930 935 940
 Ser Asp Val Ser Ile Glu Ser Ser Tyr Val Pro Leu Thr Thr Val Ala
 945 950 955 960
 Thr Ser Ser Arg Asp Pro Ser Val Leu Ala Glu Ser Ser Thr Ile Gln
 965 970 975
 Lys Pro Met Leu Ser Leu Pro Ser Ser Phe Leu Asn Thr Ser Met Thr
 980 985 990
 Phe Lys Asn Leu Ser Gln Ile Leu Ala Asp Asp Gly Asp Asp Lys His
 995 1000 1005
 Leu Ser Val Pro Gln Asn Gln Ser Arg Ser Val Ala Met Ser His Pro
 1010 1015 1020
 Leu Arg Lys Gln Ser Ala Lys Ile Ser Leu Thr Pro Arg Ser Asn Leu
 1025 1030 1035 1040
 Asn Ala Asn Leu Ser Val Lys Arg Asn Gln Gly Ser Pro Gly Ser Tyr
 1045 1050 1055
 Leu Ser Asn Asp Leu Asp Gly Ile Ser Asp Met Thr Phe Ala Met Glu
 1060 1065 1070
 Ile Pro Thr Asn Thr Phe Thr Ala Gln Ala Ile Gln Leu Met Asn Asn
 1075 1080 1085
 Asp Thr Asp Asn Asn Lys Ile Asn Thr Ser Pro Lys Ala Ser Ser Phe
 1090 1095 1100
 Thr Lys Glu Lys Val Ile Lys Ser Ala Ala Tyr Ile Ser Lys Glu Lys
 1105 1110 1115 1120
 Glu Pro Asp Asn Ser Asp Thr Asn Tyr Ile Pro Asp Tyr Thr Ile Pro
 1125 1130 1135
 Asn Thr Tyr Asp Glu Lys Ala Ile Asn Ile Phe Glu Asp Ala Pro Ser
 1140 1145 1150
 Asp Glu Gly Ser Leu Asn Thr Ser Ser Ser Glu Ser Asp Ser Arg Ala
 1155 1160 1165
 Ser Val His Arg Lys Ala Val Ser Ile Asp Thr Met Ala Thr Thr Asn
 1170 1175 1180
 Val Leu Thr Pro Ala Thr Asn Val Arg Val Ser Leu Tyr Trp Asn Asn
 1185 1190 1195 1200
 Asn Ser Ser Gly Ile Pro Arg Glu Thr Thr Glu Glu Ile Leu Ser Lys
 1205 1210 1215
 Leu Arg Leu Ser Pro Glu Asn Pro Ser Asn Thr His Met Gln Lys Arg
 1220 1225 1230

Phe Ser Ser Thr Arg Gly Ser Arg Asp Ser Asn Ala Leu Gly Ile Ser
 1235 1240 1245
 Gln Ser Leu Gln Ser Met Phe Lys Asp Leu Glu Glu Asp Gln Asp Gly
 1250 1255 1260
 His Thr Ser Gln Ala Asp Ile Leu Glu Ser Ser Met Ser Tyr Ser Lys
 1265 1270 1275 1280
 Arg Arg Pro Ser Glu Glu Ser Val Asn Pro Lys Gln Arg Val Thr Met
 1285 1290 1295
 Leu Phe Asp Glu Glu Glu Glu Glu Ser Lys Lys Val Gly Gly Gly Lys
 1300 1305 1310
 Ile Lys Glu Glu His Thr Lys Leu Asp Asn Lys Ile Ser Glu Glu Ser
 1315 1320 1325
 Ser Gln Leu Val Leu Pro Val Val Glu Lys Lys Glu Asn Ala Asn Asn
 1330 1335 1340
 Thr Glu Asn Asn Tyr Ser Lys Ile Pro Lys Pro Ser Thr Ile Lys Val
 1345 1350 1355 1360
 Thr Lys Asp Thr Ala Met Glu Ser Asn Thr Gln Thr His Thr Lys Lys
 1365 1370 1375
 Pro Ile Leu Lys Ser Val Gln Asn Val Glu Val Glu Glu Ala Pro Ser
 1380 1385 1390
 Ser Asp Lys Lys Asn Trp Phe Val Lys Leu Phe Gln Asn Phe Ser Ser
 1395 1400 1405
 His Asn Asn Ala Thr Lys Ala Ser Lys Asn His Val Thr Asn Ile Ser
 1410 1415 1420
 Phe Asp Asp Ala His Met Leu Thr Leu Asn Glu Phe Asn Lys Asn Ser
 1425 1430 1435 1440
 Ile Asp Tyr Gln Leu Lys Asn Leu Asp His Lys Phe Gly Arg Lys Val
 1445 1450 1455
 Val Glu Tyr Asp Cys Lys Phe Val Lys Gly Asn Phe Lys Phe Lys Ile
 1460 1465 1470
 Lys Ile Thr Ser Thr Pro Asn Ala Ser Ser Val Ile Thr Val Lys Lys
 1475 1480 1485
 Arg Ser Lys His Ser Asn Thr Ser Ser Asn Lys Ala Phe Glu Lys Phe
 1490 1495 1500
 Asn Asp Asp Val Glu Arg Val Ile Arg Asn Ala Gly Arg Ser
 1505 1510 1515

<210> 12

<211> 1037

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 12

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Met Thr Val Ala Asn Thr Glu Thr His Ser Ala Ala Lys Pro Ser Ser
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Thr Ile Gly Pro Trp Lys Leu Gly Glu Thr Leu Gly Phe Gly Ser Thr
              20              25              30

Gly Lys Val Gln Leu Ala Gln His Glu Arg Thr Gly His Arg Thr Ala
              35              40              45

Val Lys Val Ile Ser Lys Ser Ile Phe Asn Asn Asn Gly Asn His Ser
  50              55              60

Asn Asp Asp Ser Val Leu Pro Tyr Asn Ile Glu Arg Glu Ile Val Ile
  65              70              75              80

Met Lys Leu Leu Ser His Pro Asn Val Leu Ser Leu Tyr Asp Val Trp
              85              90              95

Glu Thr Asn Asn Asn Leu Tyr Leu Ile Leu Glu Tyr Ala Glu Lys Gly
              100              105              110

Glu Leu Phe Asn Leu Leu Val Asp His Gly Pro Leu Pro Glu Arg Glu
  115              120              125

Ala Ile Asn Cys Phe Arg Gln Ile Ile Ile Gly Ile Ser Tyr Cys His
  130              135              140

Ala Leu Gly Ile Val His Arg Asp Leu Lys Pro Glu Asn Leu Leu Leu
  145              150              155              160

Asp Ser Phe Tyr Asn Ile Lys Ile Ala Asp Phe Gly Met Ala Ala Leu
              165              170              175

Gln Thr Asp Ala Asp Leu Leu Glu Thr Ser Cys Gly Ser Pro His Tyr
              180              185              190

Ala Ala Pro Glu Ile Val Ser Gly Leu Pro Tyr Glu Gly Phe Ala Ser
  195              200              205

Asp Val Trp Ser Cys Gly Val Ile Leu Phe Ala Leu Leu Thr Gly Arg
  210              215              220

Leu Pro Phe Asp Glu Glu Asn Gly Asn Val Arg Asp Leu Leu Leu Lys
  225              230              235              240

Val Gln Lys Gly Gln Phe Glu Met Pro Asn Asp Thr Glu Ile Ser Arg
              245              250              255

Asp Ala Gln Asp Leu Ile Gly Lys Ile Leu Val Val Asp Pro Arg Gln
  260              265              270

Arg Ile Lys Ile Arg Asp Ile Leu Ser His Pro Leu Leu Lys Lys Tyr
  275              280              285

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Gln	Thr	Ile	Lys	Asp	Ser	Lys	Ser	Ile	Lys	Asp	Leu	Pro	Arg	Glu	Asn
290						295					300				
Thr	Tyr	Leu	Tyr	Pro	Leu	Ala	Asp	Ser	Asn	Asn	His	Thr	Ser	Ala	Ser
305					310					315					320
Ile	Asp	Asp	Ser	Ile	Leu	Gln	Asn	Leu	Val	Val	Leu	Trp	His	Gly	Arg
				325					330					335	
His	Ala	Asp	Asp	Ile	Val	Ser	Lys	Leu	Lys	Glu	Asn	Gly	Thr	Asn	Lys
			340					345					350		
Glu	Lys	Ile	Leu	Tyr	Ala	Leu	Leu	Tyr	Arg	Phe	Lys	Leu	Asp	Ser	Val
		355					360					365			
Arg	Gly	Ser	Asn	Lys	Lys	Asn	Arg	Asn	Lys	Ile	Lys	Lys	Thr	Lys	Lys
	370					375					380				
Asn	Lys	Arg	Ser	Ser	Thr	Leu	Ser	Ser	Ser	Ser	Ser	Leu	Leu	Leu	Asn
385					390					395					400
Asn	Arg	Ser	Ile	Gln	Ser	Thr	Pro	Arg	Arg	Arg	Thr	Ser	Lys	Arg	His
				405					410					415	
Ser	Arg	Glu	Phe	Ser	Ser	Ser	Arg	Lys	Arg	Ser	Ser	Phe	Leu	Leu	Ser
			420					425					430		
Ser	Asn	Pro	Thr	Asp	Ser	Ser	Pro	Ile	Pro	Leu	Arg	Ser	Ser	Lys	Arg
		435					440					445			
Ile	Thr	His	Ile	Asn	Val	Ala	Ser	Ala	Asn	Thr	Gln	Ala	Thr	Pro	Ser
	450					455					460				
Gly	Val	Pro	Asn	Pro	His	Lys	Arg	Asn	Ser	Lys	Lys	Arg	Ser	Ser	Lys
465					470					475					480
Arg	Leu	Ser	Tyr	Met	Pro	Asn	Thr	Lys	Arg	Ser	Ser	Leu	Thr	Ser	Lys
				485					490					495	
Ser	Leu	Ser	Asn	Phe	Thr	Asn	Leu	Ile	Asp	Asp	Asp	Asp	Trp	Glu	Tyr
			500					505					510		
Ile	Glu	Lys	Asp	Ala	Lys	Arg	Thr	Ser	Ser	Asn	Phe	Ala	Thr	Leu	Ile
		515					520					525			
Asp	Glu	Ile	Phe	Glu	Pro	Glu	Lys	Phe	Glu	Leu	Ala	Lys	Arg	Glu	Lys
	530					535					540				
Ala	Glu	Leu	Gln	Arg	Lys	Val	Gln	Glu	Ala	Lys	Arg	Gln	Ser	Val	Asn
545					550					555					560
Ala	Gln	Lys	Ile	Asn	Glu	Asp	Glu	Phe	Gly	Ser	Glu	Val	Ser	Asp	Gly
				565					570					575	
Met	Lys	Glu	Leu	Lys	Lys	Ile	Asn	Asp	Lys	Val	Ser	Ser	Pro	Leu	Ile
			580					585					590		

Asn	Tyr	Glu	Phe	Ser	Gln	Gln	Glu	Leu	Leu	Gln	Asp	Ile	Asp	Thr	Leu
	595						600					605			
Leu	Thr	Asn	Arg	Tyr	Gln	Leu	Ser	Ser	Tyr	Thr	Arg	Pro	Ile	Ser	Arg
	610					615					620				
Leu	Asp	Pro	Gly	Leu	Thr	Pro	Val	Thr	Glu	Thr	Leu	Pro	Asn	Asn	Leu
	625				630					635					640
Lys	Glu	Lys	Thr	Ala	Leu	Leu	Gln	Asp	Thr	Glu	Lys	Lys	Ile	Ile	Glu
				645					650					655	
Thr	Ile	Arg	Arg	Ser	Lys	Phe	Leu	Gly	Ser	Leu	Leu	Asn	Val	Arg	Gly
			660					665					670		
Gly	Leu	Ser	Pro	Gly	Lys	Ser	Glu	Leu	Ala	Pro	Ile	Glu	Glu	Ser	Pro
		675					680					685			
Ile	Val	Ser	Thr	Thr	Pro	Leu	Ile	Tyr	Asn	Asp	Arg	Met	Glu	Pro	Arg
	690					695					700				
Arg	Ile	Ser	Asp	Val	Glu	Val	Pro	His	Phe	Thr	Arg	Lys	Ser	Lys	His
	705				710					715					720
Phe	Thr	Thr	Ala	Asn	Asn	Arg	Arg	Ser	Val	Leu	Ser	Leu	Tyr	Ala	Lys
				725					730					735	
Asp	Ser	Ile	Lys	Asp	Leu	Asn	Glu	Phe	Leu	Ile	Lys	Glu	Asp	Pro	Asp
			740					745					750		
Leu	Pro	Pro	Gln	Gly	Ser	Thr	Asp	Asn	Glu	Ser	Arg	Ser	Glu	Asp	Pro
		755					760					765			
Glu	Ile	Ala	Glu	Ser	Ile	Thr	Asp	Ser	Arg	Asn	Ile	Gln	Tyr	Asp	Glu
	770					775					780				
Asp	Asp	Ser	Lys	Asp	Gly	Asp	Asn	Val	Asn	Asn	Asp	Asn	Ile	Leu	Ser
	785				790					795				800	
Asp	Phe	Pro	Gln	Gly	Val	Gly	Ile	Ser	Gln	Glu	Tyr	Asp	Met	Lys	Asp
				805					810					815	
Lys	Asn	Pro	Asn	Gln	Ser	Pro	Ile	Ser	Lys	Ser	Ala	Glu	Pro	Thr	Leu
			820					825					830		
Val	Val	Lys	Leu	Pro	Ser	Leu	Ser	Ser	Phe	Gln	Gly	Lys	Asn	Ala	Ser
		835					840					845			
Gly	Leu	Gly	Leu	Tyr	Gln	Arg	Glu	Pro	Ser	Lys	Val	Thr	Leu	Pro	Ser
	850					855					860				
Leu	Thr	Ser	Asn	Asn	Ser	Ser	Val	Gly	Glu	Asn	Ile	Glu	Asp	Gly	Ala
	865				870					875					880
Glu	Lys	Gly	Thr	Glu	Ser	Glu	Lys	Ile	Ala	Ala	Ser	Leu	Ser	Asp	Asp
				885					890					895	

Asp Leu Lys Glu Asp Asn Asp Lys Lys Asp Asn Asp Thr Val Asn Ala
 900 905 910
 Pro Thr Thr Val Lys Lys Pro Pro Asn Ser Val Leu Leu Lys Lys Phe
 915 920 925
 Ser Lys Gly Lys Ile Leu Glu Leu Glu Ile His Ala Lys Ile Pro Glu
 930 935 940
 Lys Arg Leu Tyr Glu Gly Leu His Lys Leu Leu Glu Gly Trp Lys Gln
 945 950 955 960
 Tyr Gly Leu Lys Asn Leu Val Phe Asn Ile Thr Asn Met Ile Ile Thr
 965 970 975
 Gly Lys Leu Val Asn Asp Ser Ile Leu Phe Leu Arg Ser Thr Leu Phe
 980 985 990
 Glu Ile Met Val Leu Pro Asn Gly Asp Gly Arg Ser Leu Ile Lys Phe
 995 1000 1005
 Asn Lys Lys Thr Gly Ser Thr Lys Thr Leu Thr Lys Leu Ala Thr Glu
 1010 1015 1020
 Ile Gln Ile Ile Leu Gln Lys Glu Gly Val Leu Asp Lys
 1025 1030 1035

<210> 13

<211> 775

<212> PRT

<213> Schizosaccharomyces pombe

<400> 13

Met Ser Thr Ile Ser Glu Val Gly Pro Trp Glu Leu Gly Leu Ser Leu
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 Gly Ser Gly Gly Pro Asn Ser Ser Arg Leu Ala Lys His Arg Glu Thr
 20 25 30
 Gly Gln Leu Ala Val Val Lys Pro Ile Val Gly Trp Ser Glu Leu Thr
 35 40 45
 Ser Ser Gln Gln Ala Arg Ile Glu Gly Glu Leu Val Leu Leu Arg Leu
 50 55 60
 Ile Glu His Pro Asn Val Leu Gln Leu Ile Asp Val Ile Ser Ala Gln
 65 70 75 80
 Glu Gln Leu Phe Val Val Val Glu Tyr Met Pro Gly Gly Glu Leu Phe
 85 90 95
 Asp Cys Met Leu Arg Lys Gly Ser Phe Thr Glu Gln Asp Thr Ala Lys
 100 105 110
 Phe Leu Trp Gln Ile Leu Cys Gly Leu Glu Tyr Cys His Lys Leu His
 115 120 125

Ile	Cys	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Leu	Tyr	Leu	Asp	Ala	His	130	135	140
Gly	Ser	Ile	Lys	Ile	Gly	Glu	Phe	Gly	Met	Ala	Ser	Ile	Gln	Gln	Pro	145	150	155
Gly	Lys	Leu	Leu	Gln	Thr	Ser	Cys	Gly	Ser	Pro	His	Tyr	Ala	Ser	Pro	165	170	175
Glu	Ile	Ile	Met	Gly	Arg	Ser	Tyr	Asp	Gly	Cys	Ala	Ser	Asp	Ile	Trp	180	185	190
Ser	Cys	Gly	Ile	Ile	Phe	Phe	Ala	Leu	Leu	Thr	Gly	Lys	Leu	Pro	Phe	195	200	205
Asp	Asp	Asp	Asn	Ile	Arg	Ser	Leu	Leu	Leu	Lys	Val	Cys	Gln	Gly	Gln	210	215	220
Phe	Glu	Met	Pro	Ser	Asn	Ile	Ser	Pro	Gln	Ala	Gln	His	Leu	Leu	Tyr	225	230	235
Arg	Met	Leu	Asp	Val	Asp	Ser	Ser	Thr	Arg	Ile	Thr	Met	Glu	Gln	Ile	245	250	255
Arg	Glu	His	Pro	Phe	Leu	Ser	Cys	Phe	Val	His	Pro	Asn	Ile	Ser	Ile	260	265	270
Pro	Ile	Ile	Ser	Ala	Pro	Ile	Gln	Pro	Ile	Asp	Pro	Leu	Ile	Val	Gln	275	280	285
His	Leu	Ser	Leu	Val	Phe	Arg	Cys	Ser	Asp	Asp	Pro	Met	Pro	Leu	Tyr	290	295	300
Glu	Lys	Leu	Ala	Ser	Gln	Ser	Pro	Leu	Val	Glu	Lys	Thr	Leu	Tyr	Thr	305	310	315
Leu	Leu	Ser	Arg	His	Leu	His	Pro	Pro	Ser	Ser	Ala	Ala	Val	Asp	Arg	325	330	335
Asn	Arg	Ala	Val	Val	Asp	Asp	Leu	Leu	Gly	Thr	Ala	Ala	Ser	Asn	Gly	340	345	350
Gln	Gln	Met	Asp	Glu	Glu	Glu	Ile	Glu	Gln	Ala	Ile	Asn	Ile	Pro	Thr	355	360	365
Leu	Ala	Pro	Tyr	Pro	Ile	Ser	Tyr	Ala	Ala	Glu	Ser	Val	Pro	Arg	Pro	370	375	380
Ala	Thr	Ser	Ala	Ser	Pro	Phe	Leu	Thr	Pro	Val	Thr	Thr	Ser	Gly	Thr	385	390	395
Phe	Asn	Tyr	Ser	Phe	Asn	Ala	Thr	Asn	Pro	Gln	Ser	Ile	Leu	Gln	Arg	405	410	415
Pro	Ala	Thr	Thr	Ser	Ser	Ala	Val	Pro	Gln	Leu	Pro	Lys	Ser	Val	Thr	420	425	430

Pro	Gly	Leu	Ala	Tyr	Pro	His	Asp	Ser	Ser	Met	Leu	Ser	Ser	Asn	Tyr	435	440	445	
Arg	Pro	Pro	Ser	Ala	Leu	Ser	Pro	Arg	Asn	Phe	Asn	Val	Ser	Ile	Asn	450	455	460	
Asp	Pro	Glu	Val	Gln	Leu	Ser	Arg	Arg	Ala	Thr	Ser	Leu	Asp	Met	Ser	465	470	475	480
Asn	Asp	Phe	Arg	Met	Asn	Glu	Asn	Asp	Pro	Ser	Ile	Val	Gly	Asn	Leu	485	490	495	
Ala	Ala	Ser	Asn	Phe	Pro	Thr	Gly	Met	Gly	Pro	Pro	Arg	Lys	Arg	Val	500	505	510	
Thr	Ser	Arg	Met	Ser	Glu	His	Thr	Gly	Asn	Arg	Val	Val	Ser	Phe	Pro	515	520	525	
Arg	Gly	Ser	Ala	Phe	Asn	Pro	Arg	Val	Thr	Arg	Phe	Asn	Val	Gly	Asn	530	535	540	
Glu	Gln	Phe	Ser	Asn	Asn	Ile	Asp	Asn	Asn	Asn	Tyr	Asn	Gln	Pro	Tyr	545	550	555	560
Ala	Asn	Ala	Thr	Met	Asn	Asn	Ser	Arg	Arg	Leu	Arg	Thr	Pro	Ser	Gly	565	570	575	
Glu	Arg	Ser	Met	Arg	Ala	Asp	Leu	Ser	Gln	Ser	Pro	Ala	Ser	Tyr	Asp	580	585	590	
Ser	Leu	Asn	Val	Pro	Lys	His	Arg	Arg	Arg	Gln	Ser	Leu	Phe	Ser	Pro	595	600	605	
Ser	Ser	Thr	Lys	Lys	Lys	Leu	Ser	Gly	Ser	Pro	Phe	Gln	Pro	Lys	Arg	610	615	620	
Ser	Phe	Leu	Arg	Arg	Leu	Phe	Ser	Ser	Glu	Pro	Ser	Cys	Lys	Cys	Val	625	630	635	640
Tyr	Ala	Ser	Leu	Val	Ala	Ser	Glu	Leu	Glu	His	Glu	Ile	Leu	Glu	Val	645	650	655	
Leu	Arg	Arg	Trp	Gln	Leu	Leu	Gly	Ile	Gly	Ile	Ala	Asp	Ile	Ile	Tyr	660	665	670	
Asp	Ser	Val	Ser	Ala	Ser	Ile	Ser	Ala	Arg	Ile	Lys	Arg	Gln	Asn	Ser	675	680	685	
Leu	Asn	Leu	Lys	Pro	Val	Arg	Phe	Arg	Ile	Ser	Val	Leu	Ala	Glu	Phe	690	695	700	
Phe	Gly	Ser	Gln	Ala	Val	Phe	Val	Leu	Glu	Ser	Gly	Ser	Ser	Thr	Thr	705	710	715	720
Phe	Asp	His	Leu	Ala	Thr	Glu	Phe	Gln	Leu	Ile	Phe	Glu	Asp	Lys	Gly	725	730	735	

Phe Leu Asp Asn Leu Glu Leu Ser Tyr Phe Gln Ala Ser Ala Ser Arg
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Pro Val Ser Arg Met Ser Val Ser Ser Ser Pro Phe Ala Val Phe Arg
 755 760 765

Gln Arg Gln Ser Val Gln Ser
 770 775

<210> 14
 <211> 593
 <212> PRT
 <213> Schizosaccharomyces pombe

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Thr Leu Gly Thr Gly Ser Thr Ser Cys Val Arg Leu Ala Lys His Ala
 20 25 30

Lys Thr Gly Asp Leu Ala Ala Ile Lys Ile Ile Pro Ile Arg Tyr Ala
 35 40 45

Ser Ile Gly Met Glu Ile Leu Met Met Arg Leu Leu Arg His Pro Asn
 50 55 60

Ile Leu Arg Leu Tyr Asp Val Trp Thr Asp His Gln His Met Tyr Leu
 65 70 75 80

Ala Leu Glu Tyr Val Pro Asp Gly Glu Leu Phe His Tyr Ile Arg Lys
 85 90 95

His Gly Pro Leu Ser Glu Arg Glu Ala Ala His Tyr Leu Ser Gln Ile
 100 105 110

Leu Asp Ala Val Ala His Cys His Arg Phe Arg Phe Arg His Arg Asp
 115 120 125

Leu Lys Leu Glu Asn Ile Leu Ile Lys Val Asn Glu Gln Gln Ile Lys
 130 135 140

Ile Ala Asp Phe Gly Met Ala Thr Val Glu Pro Asn Asp Ser Cys Leu
 145 150 155 160

Glu Asn Tyr Cys Gly Ser Leu His Tyr Leu Ala Pro Glu Ile Val Ser
 165 170 175

His Lys Pro Tyr Arg Gly Ala Pro Ala Asp Val Trp Ser Cys Gly Val
 180 185 190

Ile Leu Tyr Ser Leu Leu Ser Asn Lys Leu Pro Phe Gly Gly Gln Asn
 195 200 205

Thr Asp Val Ile Tyr Asn Lys Ile Arg His Gly Ala Tyr Asp Leu Pro
 210 215 220

Ser	Ser	Ile	Ser	Ser	Ala	Ala	Gln	Asp	Leu	Leu	His	Arg	Met	Leu	Asp
225					230					235					240
Val	Asn	Pro	Ser	Thr	Arg	Ile	Thr	Ile	Pro	Glu	Val	Phe	Ser	His	Pro
				245					250					255	
Phe	Leu	Met	Gly	Cys	Thr	Ser	Leu	Ser	Ser	Met	Asp	Ser	Thr	Thr	Pro
			260					265					270		
Pro	Thr	Pro	Ser	Leu	Ser	Ile	Asp	Glu	Ile	Asp	Pro	Leu	Val	Val	Asp
		275					280					285			
Cys	Met	Cys	Val	Leu	Trp	Lys	Lys	Ser	Ser	Ser	Lys	Lys	Val	Val	Arg
	290					295					300				
Arg	Leu	Gln	Gln	Arg	Asp	Asp	Asn	Asp	Glu	Lys	Tyr	Val	Tyr	Lys	Val
305					310					315					320
Leu	Ser	Glu	Ile	Leu	Arg	Asp	Asp	Met	Leu	Lys	Lys	Gln	Arg	Phe	Asp
				325					330					335	
Glu	Asn	Lys	Tyr	Leu	Ser	Leu	Tyr	Asp	Leu	Ile	His	Asp	Asn	Asn	Leu
			340					345					350		
Phe	Thr	Lys	Ala	Ser	Ile	Ser	Thr	Thr	Ser	Leu	Val	Lys	Ser	Asn	Val
		355					360					365			
Ser	Thr	Asn	Ser	Arg	Lys	Ser	Ser	Asn	Phe	Glu	Asp	Glu	Leu	Ala	Arg
		370				375					380				
Arg	Val	Ser	Ser	Pro	Leu	Ser	Ala	Leu	Asn	Gln	Met	Ser	Gln	Ser	Pro
385					390					395					400
Ile	Pro	Ile	Arg	Val	Ser	Ser	Asp	Lys	Asp	Tyr	Asp	Ser	Tyr	Ala	Cys
				405					410					415	
His	Glu	Val	Val	Ser	Asn	Pro	Ser	Thr	Leu	Asp	Asp	Asp	Tyr	Asn	Tyr
			420					425					430		
Met	Phe	Val	Cys	Pro	Pro	Glu	Glu	Tyr	Thr	Tyr	Ser	Thr	Asp	Asn	Val
		435					440					445			
Arg	Thr	Asp	Ser	Leu	Asp	Leu	Gln	Ser	Leu	Pro	Thr	Pro	Thr	Leu	Glu
	450				455						460				
Gln	Leu	Glu	Ser	Val	Pro	Phe	Asn	Arg	Tyr	Gly	Tyr	Val	Arg	Ile	Phe
465					470					475					480
Pro	Ser	Thr	Thr	Leu	Ser	Ser	Thr	Ala	Ser	Gly	Tyr	Tyr	Thr	Pro	Asp
				485					490					495	
Ser	Leu	Ser	Thr	Pro	Glu	Pro	Ser	Ile	Asp	Gly	Leu	Thr	Asn	Leu	Asp
			500					505					510		
Asp	Val	Gln	Val	Gly	Gly	Phe	Val	Gln	Gly	Ser	Gly	Asn	Gln	Asn	Arg
		515					520					525			

Arg Pro Ile Ser Phe Pro Val Ile Ser Asn Met Gln Pro Asn Ile Thr
 530 535 540

Asn Val Arg Ser Ala Ser Ala Pro Leu Cys Ser Ser Pro Val Pro Ser
 545 550 555 560

Arg Arg Tyr Ser Gln Tyr Ala Thr Asn Ala Arg Tyr Thr Pro Arg Lys
 565 570 575

Val Ser Ser Gly Ser Val Leu Arg Lys Ile Ser Ser Phe Phe Arg Lys
 580 585 590

Asp

<210> 15
 <211> 1462
 <212> PRT
 <213> Candida albicans

<400> 15
 Met Ser Thr Val Val Asn Arg Arg Ser Ser His Gln Phe Asp Ser Pro
 1 5 10 15

Ser Asn His Leu Asp His Ser Ser Ser Met Asn Val Asp Lys Val Val
 20 25 30

Gln Ser Val Thr Asn Ala Thr Lys Arg Leu Ser Gln Ile Ser Thr Asn
 35 40 45

Thr Asn Asn Ser Asn Lys Lys Arg Lys Thr Gln Asn Lys Ile Gly Pro
 50 55 60

Trp Lys Leu Gly Arg Thr Leu Gly Arg Gly Ser Thr Gly Arg Val Arg
 65 70 75 80

Leu Ala Lys Asn Thr Thr Thr Gly Gln Leu Ala Ala Val Lys Ile Val
 85 90 95

Pro Lys Ser Asn Phe Lys Lys Leu Glu Asn Pro Lys Tyr Lys Arg Ser
 100 105 110

Lys Glu Asp Ala Thr Arg Leu Pro Tyr Gly Ile Glu Arg Glu Ile Ile
 115 120 125

Ile Met Lys Leu Ile Ser His Pro Asn Ile Met Gly Leu Tyr Asp Val
 130 135 140

Trp Glu Asn Lys Asn Asp Leu Tyr Leu Ile Leu Glu Tyr Ile Glu Gly
 145 150 155 160

Gly Glu Leu Phe Asp Tyr Leu Ile Lys Arg Gly Lys Leu Gln Glu Tyr
 165 170 175

Glu Ala Ile Asn Tyr Phe Lys Gln Ile Ile Asn Gly Ile Asn Tyr Leu
 180 185 190

His	Gln	Phe	Asn	Ile	Cys	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	195	200	205
Leu	Asp	Phe	Asn	Lys	Asn	Ile	Lys	Ile	Ala	Asp	Phe	Gly	Met	Ala	Ala	210	215	220
Leu	Glu	Val	Lys	Glu	Lys	Leu	Leu	Glu	Thr	Ser	Cys	Gly	Ser	Pro	His	225	230	235
Tyr	Ala	Ser	Pro	Glu	Ile	Val	Ala	Gly	Lys	Asn	Tyr	His	Gly	Ala	Pro	245	250	255
Ser	Asp	Ile	Trp	Ser	Cys	Gly	Ile	Ile	Leu	Phe	Ala	Leu	Leu	Thr	Gly	260	265	270
His	Leu	Pro	Phe	Asp	Asp	Glu	Asn	Ile	Arg	Lys	Leu	Leu	Leu	Lys	Val	275	280	285
Gln	Ser	Gly	Lys	Phe	Asn	Met	Pro	Pro	Glu	Leu	Ser	Phe	Glu	Ala	Lys	290	295	300
Asp	Leu	Ile	Thr	Lys	Met	Leu	Lys	Val	Asn	Pro	Arg	Glu	Arg	Ile	Thr	305	310	315
Ile	Asp	Ala	Ile	Leu	Thr	His	Pro	Leu	Leu	Ala	Lys	Tyr	Pro	Glu	Pro	325	330	335
Thr	Val	Ser	Tyr	Ser	Ser	Thr	Thr	Thr	Leu	Asp	Ile	Asn	Ser	Ile	Asn	340	345	350
Ile	Lys	Gln	Ile	Glu	Ser	Val	Asp	Lys	Ile	Asp	Lys	Glu	Ile	Leu	Lys	355	360	365
Asn	Leu	Ser	Val	Leu	Phe	His	Asn	Cys	Asp	Glu	Lys	Thr	Ile	Ile	Ser	370	375	380
Arg	Leu	Leu	Ser	Pro	Asn	Arg	Cys	Pro	Glu	Lys	Met	Phe	Tyr	Tyr	Leu	385	390	395
Leu	Met	Lys	Tyr	Arg	Asn	Glu	His	Leu	Ser	Asn	Ser	Asn	Ser	Phe	Asn	405	410	415
Ser	Ser	Asn	Asp	Val	Asp	Ser	Ala	Arg	Ser	Leu	Pro	Arg	Ser	Thr	Ser	420	425	430
Tyr	Val	Lys	Thr	Thr	Val	Thr	Asp	His	Ala	Thr	Gly	Glu	Lys	His	Thr	435	440	445
Thr	Val	Lys	Lys	Ile	Gln	Gln	Ser	Ser	Ser	Ile	Tyr	Ser	Asn	Arg	Ser	450	455	460
Leu	Leu	Lys	Lys	Ser	Thr	Ser	Ala	Lys	Gly	Asn	Val	Leu	Ser	Asn	Ile	465	470	475
Thr	Asn	Arg	Pro	Asn	Thr	Pro	Lys	Gln	Phe	Ser	Ala	Ser	Ser	Ser	Phe	485	490	495

Asn	Lys	Lys	Lys	Ala	Leu	His	Ser	Lys	Thr	Gln	Ile	Tyr	Ala	Ser	Arg	500	505	510
Ser	Arg	Asn	Ala	Ser	Ser	Arg	Ser	Leu	Lys	Ser	Asn	Ser	Ser	Thr	Gly	515	520	525
Arg	Asn	Gly	Asn	Asn	Ala	Ser	Val	Thr	Ser	Val	Asn	Lys	Ile	Pro	Glu	530	535	540
Ile	Thr	Gly	Ala	Thr	Val	Leu	Gln	Pro	Ile	Pro	Ser	Met	Ala	Met	Asn	545	550	555
Arg	Gly	Asp	Glu	Gln	Gln	Asn	Lys	Thr	Lys	Lys	Asn	Leu	Thr	Gly	Thr	565	570	575
Phe	Gly	Asn	Lys	Ser	Leu	Leu	Asn	Phe	Gln	Leu	Ile	Cys	Glu	Glu	Val	580	585	590
Phe	Glu	Asn	Asp	Lys	Glu	Asn	Ser	Lys	Pro	Val	Ser	Lys	Thr	Pro	Val	595	600	605
Ser	Gln	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Ile	Glu	Thr	Pro	Thr	Ser	610	615	620
Arg	Thr	Asn	Ser	Val	Lys	Arg	Gly	Lys	Thr	Trp	Ser	Leu	Ala	Arg	Arg	625	630	635
Glu	Arg	Glu	Leu	Ala	Glu	Gln	Val	Arg	Gln	Arg	Asn	Glu	Ala	Arg	Glu	645	650	655
Asn	Lys	Leu	Lys	Ala	Glu	Glu	Leu	Ala	Arg	Lys	Glu	Leu	Glu	Gln	Glu	660	665	670
Lys	Lys	Arg	Ile	Ala	Glu	Glu	Lys	Lys	Arg	Leu	Glu	Gln	Gln	Glu	Arg	675	680	685
Glu	Leu	Asp	Glu	Lys	Gln	Lys	Leu	Gln	Glu	Lys	Gln	Lys	Ala	Ala	Leu	690	695	700
Glu	Lys	Leu	Gln	Lys	His	Gln	Ser	Ala	His	Asp	Phe	Glu	Gly	Leu	Phe	705	710	715
Ala	Ser	Asn	Arg	Arg	Ser	Val	Thr	Asp	Met	Ala	Pro	Ser	Ser	Gly	Met	725	730	735
Ser	Ser	Leu	Asp	Pro	Arg	Ala	His	Met	Val	Ser	Arg	Ala	Asn	Thr	Ile	740	745	750
Gly	Ser	Pro	Asn	Leu	Ser	Ser	Ser	Ser	Val	Asn	Ile	Asp	Glu	Asn	Ala	755	760	765
Ser	Lys	Val	Leu	His	Lys	Phe	Gly	Ile	Asp	Val	Ala	Pro	Ser	Pro	Lys	770	775	780
Arg	Phe	Ser	Arg	Ala	Ser	Lys	Thr	Ser	Thr	Ser	Lys	Asn	Leu	Ser	Ser	785	790	795
																		800

Phe	Leu	Ala	Pro	Thr	Val	Ser	Arg	Asn	Leu	Ser	Ser	Gln	Leu	Lys	Thr		
				805					810					815			
Ser	Ser	Ser	Lys	Asn	Leu	Ala	Gly	Tyr	Leu	His	Gly	Thr	Thr	Asp	Thr		
			820					825					830				
Asn	Gly	Ser	Ala	Ile	Ala	Ala	Lys	Lys	Lys	Asp	Asp	Ser	Thr	Asn	Glu		
		835					840					845					
Ala	Leu	Thr	Ile	Glu	Glu	Phe	Asn	Ala	Lys	Glu	Arg	Thr	Ser	Met	Ser		
	850					855					860						
Pro	Ser	Ile	Ser	Lys	Ala	Ser	Val	Asn	Lys	Arg	Asn	Ser	Asn	Gln	Ser		
865					870					875					880		
Ser	Tyr	Tyr	Arg	Ser	Met	Phe	Ser	Asp	Asn	Gly	Asn	Asp	Asp	Asn	Val		
				885					890					895			
Thr	Lys	Val	Arg	Thr	Gly	Glu	Ser	His	Leu	Ser	Val	Gln	Glu	Glu	Glu		
			900					905					910				
Glu	Met	Asp	Met	Glu	Asn	Ala	Ile	Asp	Glu	Asp	Ile	Ser	Leu	Ile	Pro		
		915					920					925					
Asn	Pro	Arg	Phe	Ser	Arg	Phe	Ser	Phe	Gly	Gly	Leu	Leu	Gly	Ser	Asn		
	930					935					940						
Thr	Val	Ala	Asn	Glu	Glu	Gly	Asp	Trp	Thr	Ile	Met	Asn	Ser	Thr	Leu		
945					950					955					960		
Asn	His	Ser	Asn	Thr	Val	Val	Arg	Gly	Thr	His	Asn	Lys	Ser	Ser	Thr		
				965					970					975			
Met	Leu	Gly	Leu	Gly	Ile	Lys	Met	Arg	Asp	Thr	Thr	Thr	Ile	Lys	Glu		
			980					985					990				
Asp	Glu	Glu	Phe	Glu	Asp	Glu	Lys	Pro	Phe	Ile	Ser	Val	Pro	Ser	Ser		
		995					1000					1005					
Glu	Asp	Asp	Glu	Gly	Asn	Thr	His	Lys	Asn	Lys	Arg	Gly	Gly	Leu	Arg		
	1010					1015					1020						
Asp	Ser	Gly	Asn	Tyr	Asp	Phe	Asp	Glu	Glu	His	Ser	Val	Ala	Ser	Thr		
1025				1030					1035						1040		
Ala	Asn	Thr	Glu	Tyr	Ser	Asp	Val	Ala	Ser	Gln	Gly	Gln	Gln	Met	Pro		
			1045					1050						1055			
Gly	Ser	His	Thr	Ile	His	Gln	Leu	Glu	Thr	Glu	Leu	Ser	Asn	Phe	Asp		
			1060				1065						1070				
Leu	Leu	Ser	Tyr	Arg	Val	Ala	Asp	Ile	Gly	Lys	Val	Asn	Lys	His	Lys		
	1075						1080					1085					
Pro	Ser	Ile	Val	Asp	Ser	Lys	Glu	Thr	Leu	Leu	Lys	Asn	His	Ser	Ser		
	1090					1095					1100						

Asp Glu Ala Thr Ile Glu Val Lys Glu Asp Asn Asn Glu His Asp Phe
 1105 1110 1115 1120
 Asn Asp Lys Ile Lys Gln His Tyr Asp Asp Asn Gly Asp Ser Glu Glu
 1125 1130 1135
 Asp Asp Glu Asp Glu Asp Glu Glu Glu Asp Asp Asp Asp Asp
 1140 1145 1150
 Asp Ala Arg Ser Ser Phe Glu Ala Arg Pro His Ser His Asn Tyr Ser
 1155 1160 1165
 Leu Ala Glu Ile Thr Ser Glu Ser Pro Val Gly Gly Gly Tyr Glu Ser
 1170 1175 1180
 Pro Ser Ile Ala Asn Asp Phe Lys Lys Ser Arg His Ser Thr Gly Ile
 1185 1190 1195 1200
 Phe Ser Thr Thr Gln Phe Pro Arg Ser Pro Tyr Val Val Asn Asn Asn
 1205 1210 1215
 Gly Asp Ser Asn Lys Asp Glu Asn Ser Gln Gln Gln Thr Lys His Met
 1220 1225 1230
 Leu Asn Asp Gly His Lys Gly Leu Ile Thr Ser Pro Val Gln Asp Thr
 1235 1240 1245
 Phe Gly Ser Lys Lys Pro Val Glu Ser Asn Ser Leu Phe Arg Arg Leu
 1250 1255 1260
 Ser Leu Asn Pro Asn Arg Ala Ala Pro Lys Ala Pro Ala Pro Pro Pro
 1265 1270 1275 1280
 Pro Ser Ala Pro Ile Ser Ser Ala Ala Lys Ala Asn Ile Ser Gln Pro
 1285 1290 1295
 Leu Ser Ser Pro Thr Lys Gly His Asn Arg Phe Ser Arg Ile Ser Ile
 1300 1305 1310
 Gly Ser Lys Asn Met Leu Gln Lys Glu Asp Lys Ser Thr Lys Ser Asn
 1315 1320 1325
 Trp Phe Lys Lys Phe Phe His Ser Leu Thr Thr Pro Ser Ala Lys Asp
 1330 1335 1340
 Gln Ser Gly Asn Ser Ser Ser Lys Val Ala Ser Lys Asp Ile Lys Ile
 1345 1350 1355 1360
 Ile Asp Thr Ser Leu Thr Ala Ala Gln Leu Ile Arg Val Ile Lys Tyr
 1365 1370 1375
 Gln Leu Glu Leu Lys Lys Ile Glu Gly Ser Ile Ser Lys Val Asp Ile
 1380 1385 1390
 Asp Glu Glu Phe Gly Leu Ile Ser Gly Val Ile Pro Ser Lys Phe Ala
 1395 1400 1405

Asn Gly Arg Lys Leu Lys Phe Lys Ile Glu Val Ile Asp Leu Ile Asn
 1410 1415 1420

Ser Ser Ser Leu His Val Ile Lys Met Lys Gly Asn Asp Lys Gly Phe
 1425 1430 1435 1440

Gln Ser Leu Val Asn Ile Val Thr Phe Ile Ile Lys Lys Glu Glu Gln
 1445 1450 1455

Asp Lys Ile Ser Arg Arg
 1460

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<211> 1349

<212> PRT

<213> Candida albicans

<400> 16

Met Pro His Ser Arg Gln Pro Ser Ile Ser Ser Ser Ile Met Ser Gln
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Ser Asn His Asn His Pro Gln Lys Ile Gly Pro Trp Lys Leu Gly Lys
 20 25 30

Thr Leu Gly Arg Gly Ala Thr Gly Arg Val Leu Leu Ala Thr His Gln
 35 40 45

Thr Thr Gly Gln Lys Ala Ala Val Lys Val Val Ser Lys Ser Glu Leu
 50 55 60

Gln Asp Glu Glu Thr Glu Lys Asn Gly Asp Gly Leu Pro Tyr Gly Ile
 65 70 75 80

Glu Arg Glu Ile Ile Ile Met Lys Leu Leu Thr His Pro Asn Val Leu
 85 90 95

Arg Leu Tyr Asp Val Trp Glu Thr Ser Lys Ala Leu Tyr Leu Val Leu
 100 105 110

Glu Tyr Val Glu Gly Gly Glu Leu Phe Asp Leu Leu Val Glu Arg Gly
 115 120 125

Pro Leu Pro Glu Val Glu Ala Ile Lys Tyr Phe Arg Gln Ile Ile Leu
 130 135 140

Gly Thr Ala Tyr Cys His Ala Leu Gly Ile Cys His Arg Asp Leu Lys
 145 150 155 160

Pro Glu Asn Leu Leu Leu Asp Ser Gln Leu Asn Val Lys Leu Ala Asp
 165 170 175

Phe Gly Met Ala Ala Leu Glu Ser Asn Gly Lys Leu Leu Glu Thr Ser
 180 185 190

Cys Gly Ser Pro His Tyr Ala Ala Pro Glu Ile Val Ser Gly Leu Lys
 195 200 205

Tyr	His	Gly	Ala	Ala	Ser	Asp	Val	Trp	Ser	Cys	Gly	Val	Ile	Leu	Phe
210						215					220				
Ala	Leu	Leu	Thr	Gly	Arg	Leu	Pro	Phe	Asp	Asp	Glu	Asn	Ile	Arg	Asn
225					230					235					240
Leu	Leu	Leu	Lys	Val	Gln	Ala	Gly	Asn	Phe	Glu	Met	Pro	Val	Asp	Glu
				245					250					255	
Val	Ser	Arg	Glu	Ala	Arg	Asp	Leu	Ile	Ala	Arg	Met	Leu	Glu	Val	Asp
			260					265					270		
Pro	Met	Arg	Arg	Ile	Ser	Thr	Glu	Lys	Ile	Leu	Arg	His	Pro	Leu	Leu
		275					280					285			
Thr	Lys	Tyr	Pro	Met	Ser	Asn	Glu	Asp	Leu	Ile	Ser	Glu	Lys	Ser	Leu
290						295					300				
Pro	His	Pro	Gln	Thr	Gly	Tyr	Lys	Ser	Leu	Gly	Ser	Val	Arg	Asn	Ile
305					310					315					320
Asp	Lys	Gln	Ile	Leu	Ser	Asn	Leu	Thr	Ile	Leu	Trp	Asn	Asp	Arg	Pro
				325					330					335	
Glu	Glu	Glu	Ile	Val	Asp	Cys	Leu	Leu	Lys	Asp	Gly	Ser	Asn	Pro	Glu
			340					345					350		
Lys	Thr	Phe	Tyr	Ala	Leu	Leu	Met	Arg	Tyr	Lys	His	Asn	Gln	Glu	Asp
		355					360					365			
Asn	Thr	Asn	Asn	Asn	Ser	Pro	Lys	Lys	Ser	Thr	Ser	Phe	Asn	Asn	Lys
370						375					380				
Val	Val	Arg	Ser	Gly	Ser	Lys	Tyr	Ser	Leu	Asn	Gly	Thr	Pro	Arg	Arg
385					390					395					400
Lys	Arg	Ala	Ser	His	Ile	Ser	Val	Ser	Arg	Pro	Thr	Ser	Phe	Gln	Tyr
				405					410					415	
Lys	Ser	Asn	Pro	Gly	Ala	Gly	Ala	Thr	Ala	Asn	Arg	Asn	Ser	Val	Ala
			420					425					430		
Arg	His	Ser	Val	Ala	Ser	Ser	Ala	Asn	Asn	Ser	Pro	Arg	Lys	Ser	Pro
		435					440					445			
Tyr	Lys	Ser	Pro	Tyr	Arg	Ser	Pro	Tyr	Arg	Ser	Pro	Tyr	Lys	Ser	Pro
450						455					460				
Ser	Lys	Arg	Tyr	Ser	Tyr	Asn	Gln	Ser	Pro	Thr	Lys	Ser	Pro	Tyr	Gly
465					470					475					480
Arg	Arg	Ser	Asn	Ser	Gln	Arg	Gln	Phe	Glu	Asn	Glu	Pro	Leu	Lys	Ala
				485					490					495	
Lys	Pro	Arg	Asn	Ile	Tyr	Asn	Glu	Ile	Val	Asp	Ala	Gln	Ser	Asn	Phe
			500					505					510		

Ser	Leu	Pro	Pro	Ser	Leu	Pro	Pro	Ser	Leu	Pro	Ser	Lys	Asp	Ser	Arg
	515						520					525			
Tyr	Met	Ile	Asp	Glu	Pro	Asn	Gln	Pro	Gln	Leu	Gln	Gln	Pro	Ala	Leu
	530					535					540				
Ser	Gln	Val	Pro	Glu	Asn	Pro	Ile	Val	Asp	Glu	Ser	Pro	Asp	Leu	Met
545					550					555					560
Gln	Ser	Ala	Lys	Ile	Ser	Ser	Gly	Lys	Arg	Asn	Ser	Ile	Ile	Gly	Lys
				565					570					575	
Asn	Asn	Asn	Asn	Ser	Asn	Ser	Asn	Lys	Arg	Met	Ser	Lys	Arg	Lys	Ser
			580					585					590		
Ile	Arg	Ala	Ser	Met	Thr	Thr	Gly	Leu	Lys	Arg	Asn	Ser	Ile	Thr	Met
		595					600						605		
Lys	Leu	Leu	Ser	Thr	Tyr	Ala	Lys	Leu	Ser	Gly	Asp	Asp	Asp	Trp	Glu
	610					615					620				
Tyr	Met	Asp	Lys	Gln	Thr	Lys	Arg	Thr	Ser	Ala	Thr	Phe	Ala	Ala	Leu
625					630					635					640
Cys	Asp	Lys	Ile	Phe	Asn	Gln	Glu	Asp	Tyr	Asp	Glu	Glu	Asp	Glu	Gln
				645					650					655	
Leu	Val	Asp	Pro	Glu	Glu	Lys	Glu	Ala	Lys	Glu	Tyr	Glu	Arg	Leu	Met
			660					665					670		
Glu	Leu	Glu	Arg	Lys	Lys	His	Glu	Ala	Glu	Leu	Lys	Ala	Arg	Arg	Glu
		675					680					685			
Leu	Glu	Lys	Lys	Lys	Arg	Arg	Gln	Lys	Arg	Arg	Ser	Ile	Leu	Ser	Ser
	690					695					700				
Lys	Lys	Leu	Ser	Ile	Ile	Val	Lys	Asn	Asp	Ala	Asp	Pro	Asn	Asn	Ser
705					710					715					720
Glu	Gln	Glu	Leu	Val	Asp	Glu	Gly	Ile	Lys	Gln	Pro	Lys	Arg	Gln	Ser
				725					730					735	
Lys	Asn	Leu	Thr	Ala	Leu	Arg	Ala	Leu	Ser	Glu	Gly	Asn	His	Ala	Ser
			740					745					750		
Glu	Glu	Leu	Thr	Leu	Glu	Asp	Val	Glu	Asn	Leu	Lys	Arg	Arg	Ser	Ala
		755					760					765			
Ser	Gln	Pro	Val	Pro	Lys	Arg	Arg	Gln	Thr	Pro	Val	Leu	Thr	Arg	Arg
	770					775					780				
Pro	Val	Ser	Arg	Leu	Asp	Pro	Leu	Trp	Gln	Ala	His	Glu	Asn	Glu	Gln
785					790					795					800
Leu	Asp	Arg	Ala	Lys	Asp	Ala	Leu	Glu	Gln	Glu	Trp	Arg	Asp	Ser	Gln
				805					810					815	

Lys	Arg	Ser	Ser	Thr	Val	Ser	Arg	Lys	Lys	Val	Asn	Arg	Glu	Ser	Met	820	825	830
Ile	Ser	Val	Met	Asp	Asp	Ile	Val	Glu	Glu	Asp	Gln	Gly	Arg	Val	Asn	835	840	845
Arg	Arg	Ser	Thr	Arg	Asn	Thr	Tyr	Tyr	Glu	Arg	Glu	Arg	Asp	Tyr	Glu	850	855	860
Leu	Pro	Glu	Pro	Thr	Val	Glu	Asp	Ser	Asn	Leu	Thr	Asp	Asp	Tyr	Met	865	870	875
Thr	Glu	Ile	Arg	Lys	Ser	Arg	Leu	Leu	Asn	Ser	Gln	Leu	Asn	Val	Arg	885	890	895
Asp	Pro	Leu	Asn	Glu	Lys	Arg	Lys	Ser	Glu	Pro	Lys	Thr	Leu	Ile	Ser	900	905	910
Asn	Val	Gln	Ile	Pro	Ser	Val	Thr	Arg	Lys	Ser	Arg	Asn	Phe	Thr	Thr	915	920	925
Ser	Asn	Lys	Arg	Leu	Ser	Val	Leu	Ser	Met	Tyr	Ser	Thr	Lys	Glu	Ser	930	935	940
Tyr	Arg	Asp	Leu	Asn	Ser	Ile	Ile	Asn	Ser	Pro	Asp	Glu	Asn	Pro	Glu	945	950	955
Gln	His	Gln	Asn	Met	Asn	Lys	Pro	Ala	Leu	Arg	Thr	Ser	Ile	Ala	Asp	965	970	975
Arg	Leu	Asp	Lys	Ala	Gly	Leu	Ala	Glu	Pro	Glu	Tyr	Glu	Thr	Glu	Thr	980	985	990
Asp	Gly	Glu	Asp	Lys	Val	Ser	Val	Ile	Asp	Leu	Asp	Asp	His	Leu	Ala	995	1000	1005
Asp	Arg	Arg	Thr	Ser	Tyr	Tyr	Asp	Gly	Ser	Gly	Lys	Arg	Ala	Ser	Arg	1010	1015	1020
Ala	Ser	Thr	Thr	Lys	Arg	Tyr	Asn	Val	His	Ser	Ser	Ser	Gly	Gln	Arg	1025	1030	1035
Pro	Lys	Ser	Lys	Val	Pro	Asp	Leu	Pro	Lys	Asn	Asp	Tyr	Asp	Asp	Thr	1045	1050	1055
Phe	Val	Ser	Asn	Ser	Asp	Glu	Val	His	Lys	Arg	Gln	Tyr	Lys	Ser	Met	1060	1065	1070
Val	Ser	Asp	Glu	Ser	Ser	Ala	Ser	Asp	Asp	Val	Phe	Asp	Lys	Ile	Lys	1075	1080	1085
Leu	Pro	Asp	Gly	Lys	Ser	Thr	Lys	Ser	Ser	Ile	Asp	Glu	Leu	Ala	Asn	1090	1095	1100
Gly	Thr	Ser	Thr	Ser	Gly	His	Arg	Lys	Pro	Lys	Ile	Arg	His	Ser	Gln	1105	1110	1115
																		1120

Pro Gly Pro Glu Met Leu Ile Pro His Leu Asn Gly Gly Ile Glu Ser
 1125 1130 1135
 Ser Gln Pro Met Ser Lys Val Arg Gly Asn Asn Ser Ser Gly His Asp
 1140 1145 1150
 Asp Ser Val Pro Pro Pro Pro Pro Ala His Lys Val Asn Lys Lys Pro
 1155 1160 1165
 Leu Asp Asp Lys Thr Asn Phe Pro Pro Pro Glu Val Asp Pro Lys Arg
 1170 1175 1180
 Lys Gly Ser Phe Phe Arg Lys Leu Ser Trp Gly Ser Lys Lys Thr Ile
 1185 1190 1195 1200
 Glu Asn Asn Thr Asn Ala Ala Thr Asn Thr Thr Thr Gln Gln Gln Leu
 1205 1210 1215
 Pro Ser Pro Ala Glu Ser Lys Glu Glu Lys Pro Lys Ser Ser Phe Phe
 1220 1225 1230
 Arg Trp Phe Ser Ser Ser Asn Thr Pro Ser Ala Ala Glu Ile Arg Lys
 1235 1240 1245
 Phe Asn Thr Ile Leu Pro Lys His Glu Met Ser Thr Ala Leu Phe Ala
 1250 1255 1260
 Leu Leu Asn Ser Trp Ser Asn Phe Gly Leu Lys Asp Leu Arg Asn Asp
 1265 1270 1275 1280
 Gln Val Gly Tyr Tyr Ile Thr Gly Ala Ile Ser Lys His Asn Ser Phe
 1285 1290 1295
 Asn Leu Lys Ser Cys Lys Phe Arg Ile Lys Ile Asn Gln Arg Asp Phe
 1300 1305 1310
 Asn Gln Lys Ser Glu Ile Val Cys Val Arg Val Lys Gly Ser Lys Val
 1315 1320 1325
 Thr Thr Asp Thr Leu Phe Ser Glu Ile Glu Lys Val Leu Leu Lys Glu
 1330 1335 1340
 Gly Val Leu Asp Lys
 1345

<210> 17
 <211> 1029
 <212> PRT
 <213> *Saccharomyces cerevisiae*

<400> 17
 Met Thr Leu Asp Tyr Glu Ile Tyr Lys Glu Gly Gly Ile Leu Asn Asn
 1 5 10 15
 Arg Tyr Gln Lys Ile Glu Asp Ile Ser Glu Gly Ser Tyr Gly Tyr Val
 20 25 30

Ser	Leu	Ala	Lys	Asp	Val	Arg	Glu	Lys	Arg	Leu	Val	Ala	Val	Lys	Tyr	35	40	45	
Ile	Phe	Lys	Leu	Glu	Asp	Asp	Gly	Gln	Tyr	Asp	Gly	Pro	Gln	Asp	Asp	50	55	60	
Glu	Asn	Asp	Cys	Asp	Ser	Ser	Asp	Cys	Asp	Asp	Asp	Glu	Asp	Thr	Lys	65	70	75	80
Val	Asp	Thr	Asp	Arg	His	Glu	Asn	Glu	Asn	Gly	Asn	Ala	Ser	Ser	Asn	85	90	95	
Asn	Gly	Ser	Ser	Arg	Glu	Lys	Lys	His	Asn	Leu	Tyr	Lys	His	Lys	Lys	100	105	110	
Ser	Leu	Ile	Ser	Ser	Lys	Val	Lys	Ser	Arg	Leu	Ser	Asn	Asn	Ile	Cys	115	120	125	
Leu	Glu	Ala	Met	Tyr	Glu	Val	Asp	Ile	Gln	Thr	Lys	Ile	Gly	Arg	His	130	135	140	
Gln	Asn	Ile	Ala	Ala	Leu	Leu	Asp	Phe	Phe	Asp	Ser	Tyr	Ile	Ile	Met	145	150	155	160
Glu	Tyr	Cys	Ser	Gly	Gly	Asp	Leu	Tyr	Glu	Ala	Ile	Lys	Ala	Asp	Ala	165	170	175	
Val	Pro	Lys	Lys	Thr	Lys	Ser	Ile	Thr	His	Ile	Ile	Thr	Gln	Ile	Met	180	185	190	
Asp	Ala	Ile	Glu	Tyr	Val	His	Asn	Lys	Gly	Ile	Tyr	His	Arg	Asp	Ile	195	200	205	
Lys	Pro	Glu	Asn	Ile	Leu	Ile	Ser	Gly	Ile	Asp	Trp	Thr	Ile	Lys	Leu	210	215	220	
Thr	Asp	Trp	Gly	Leu	Ala	Thr	Thr	Asp	Lys	Thr	Ser	Met	Asp	Arg	Asn	225	230	235	240
Val	Gly	Ser	Glu	Arg	Tyr	Met	Ser	Pro	Glu	Leu	Phe	Asp	Ser	Asn	Leu	245	250	255	
Asp	Ile	Lys	Glu	Arg	Lys	Glu	Pro	Tyr	Asp	Cys	Ala	Lys	Val	Asp	Leu	260	265	270	
Trp	Ala	Met	Gly	Ile	Val	Phe	Leu	Asn	Ile	Val	Phe	His	Lys	Asn	Pro	275	280	285	
Phe	Ser	Ile	Ala	Asn	Gln	Ser	Asp	Lys	Ser	Phe	Cys	Tyr	Phe	Ala	Ala	290	295	300	
Asn	Arg	Glu	Ala	Leu	Phe	Asp	Val	Phe	Ser	Thr	Met	Ala	Tyr	Asp	Phe	305	310	315	320
Phe	Gln	Val	Leu	Arg	Tyr	Ser	Leu	Thr	Ile	Asp	Pro	Ala	Asn	Arg	Asp	325	330	335	

Leu	Lys	Met	Met	Arg	Thr	Glu	Leu	Gln	Asn	Leu	Ser	Glu	Tyr	Thr	Leu
			340					345					350		
Asp	Asp	Glu	Tyr	Tyr	Asn	Asn	Leu	Asp	Glu	Gly	Tyr	Glu	Glu	Thr	Met
		355					360					365			
Ile	Asp	Gly	Leu	Pro	Pro	Gln	Pro	Val	Pro	Pro	Ser	Ser	Ala	Pro	Val
	370					375					380				
Ser	Leu	Pro	Thr	Pro	Ile	Ser	Ser	Ser	Asn	Lys	Gln	His	Met	Pro	Glu
385					390					395					400
Phe	Lys	Lys	Asp	Phe	Asn	Phe	Asn	Asn	Val	Asn	Glu	Arg	Lys	Arg	Ser
				405					410					415	
Asp	Val	Ser	Gln	Asn	Gln	Asn	Val	Ala	Ser	Gly	Phe	Phe	Lys	Lys	Pro
			420					425					430		
Ser	Thr	Gln	Gln	Gln	Lys	Phe	Phe	Asn	Gln	Gly	Tyr	Asn	Thr	Thr	Leu
		435					440					445			
Ser	Thr	His	Glu	Arg	Ala	Lys	Ser	Ala	Pro	Lys	Phe	Lys	Phe	Lys	Lys
		450				455					460				
Arg	Asn	Lys	Tyr	Gly	Arg	Thr	Asp	Asn	Gln	Phe	Ser	Lys	Pro	Val	Asn
465					470					475					480
Ile	Glu	Asp	Arg	Lys	Lys	Ser	Lys	Ile	Leu	Lys	Lys	Ser	Arg	Lys	Pro
				485					490					495	
Leu	Gly	Ile	Pro	Thr	Pro	Asn	Thr	His	Met	Asn	Asn	Phe	Phe	His	Asp
			500					505					510		
Tyr	Lys	Ala	Arg	Asp	Glu	Phe	Asn	Thr	Arg	Asp	Phe	Phe	Thr	Pro	Pro
		515					520					525			
Ser	Val	Gln	His	Arg	Tyr	Met	Glu	Gly	Phe	Ser	Asn	Asn	Asn	Asn	Lys
		530				535					540				
Gln	Tyr	Arg	Gln	Asn	Arg	Asn	Tyr	Asn	Asn	Asn	Asn	Asn	Asn	Ser	Asn
545					550					555					560
Asn	Asn	His	Gly	Ser	Asn	Tyr	Asn	Asn	Phe	Asn	Asn	Gly	Asn	Ser	Tyr
				565					570					575	
Ile	Lys	Gly	Trp	Asn	Lys	Asn	Phe	Asn	Lys	Tyr	Arg	Arg	Pro	Ser	Ser
			580					585					590		
Ser	Ser	Tyr	Thr	Gly	Lys	Ser	Pro	Leu	Ser	Arg	Tyr	Asn	Met	Ser	Tyr
		595					600					605			
Asn	His	Asn	Asn	Asn	Ser	Ser	Ile	Asn	Gly	Tyr	Ala	Arg	Arg	Gly	Ser
	610					615					620				
Thr	Thr	Thr	Val	Gln	His	Ser	Pro	Gly	Ala	Tyr	Ile	Pro	Pro	Asn	Ala
625					630					635					640

Arg	Asn	His	His	Val	Ser	Pro	Thr	Asn	Gln	Phe	Leu	Arg	Val	Pro	Gln
				645					650					655	
Ser	Thr	Ala	Pro	Asp	Ile	Ser	Thr	Val	Leu	Gly	Gly	Lys	Pro	Ser	Tyr
			660					665					670		
Gln	Glu	His	Tyr	Thr	Gln	Asp	Ser	Met	Asp	Ser	Glu	Gly	Asp	His	Asp
		675					680					685			
Ser	Asp	Asp	Val	Leu	Phe	Thr	Leu	Glu	Glu	Gly	Asp	His	Asp	Phe	Val
	690					695					700				
Asn	Gly	Met	Asp	Asn	Leu	Ser	Ile	Asn	Asp	His	Leu	Pro	His	Thr	Thr
705					710					715					720
Val	Gly	Ser	His	Asn	Glu	Val	Phe	Val	His	Ala	Ser	Thr	Asn	His	Asn
				725					730					735	
Asn	Asn	Gly	Asn	Asn	Asn	His	Ile	Asp	Thr	Asn	Ser	Thr	Thr	Asn	Gln
			740					745					750		
Tyr	His	Arg	Gln	Tyr	Ile	Pro	Pro	Pro	Leu	Thr	Thr	Ser	Leu	His	Ile
		755					760					765			
Asn	Asn	Asn	Asn	Asn	Glu	Ser	Asn	Glu	Leu	Pro	Asp	Leu	Leu	Lys	Ser
		770				775					780				
Pro	Ala	Ser	Ser	Glu	Ala	His	Leu	Asn	Leu	Ser	Ser	Gly	Pro	Ile	Asp
785					790					795					800
Pro	Ile	Leu	Thr	Gly	Asn	Ile	Gly	Asn	Arg	Tyr	Ser	His	Ser	Ser	Asp
				805					810					815	
Ser	Lys	Glu	Leu	Glu	Gln	Glu	Arg	Arg	Leu	Ser	Met	Glu	Gln	Lys	Phe
			820					825					830		
Lys	Asn	Gly	Val	Tyr	Val	Pro	Pro	His	His	Arg	Lys	Ser	Phe	Asn	Leu
		835					840					845			
Gly	Thr	Gln	Val	Pro	Pro	Met	Asn	Met	Lys	Thr	Ser	Asn	Glu	Ala	Thr
	850					855					860				
Leu	Ser	Val	Ser	His	Asn	Ser	Val	Asn	Phe	Gly	Gly	Ser	Tyr	Asn	Ser
865					870					875					880
Arg	Arg	Ser	Ser	Ala	Asn	Glu	Ser	Asn	Pro	Leu	His	Met	Asn	Lys	Ala
				885					890					895	
Leu	Glu	Lys	Leu	Ser	Ser	Ser	Pro	Gly	Ala	Lys	Ser	Ser	Phe	Val	Gly
			900					905					910		
Phe	Pro	Lys	Pro	Leu	Leu	Pro	Arg	Asn	His	Ser	Ser	Thr	Thr	Ile	Ala
		915					920					925			
Leu	Gln	Asn	Glu	Asp	Val	Phe	Ala	Asp	Ser	Asn	Asn	Asp	Ala	Ile	Ile
	930					935					940				

Phe Glu Asp Glu Glu Tyr Glu Gly Glu Ser Asp Lys Met Ala His Gly
 945 950 955 960
 Lys Met Glu Gly Gly Asp Asn Glu Ser Ser Ser Thr Ser Pro Asp Glu
 965 970 975
 Arg Gln Ile Phe Gly Pro Tyr Glu Ile Tyr Ala Gln Thr Phe Ala Gly
 980 985 990
 Ser Thr His Asp Lys Lys Leu Gly Ala Gly Arg Lys Thr Ser Ile Gln
 995 1000 1005
 Asp Glu Met Val Gly Ser Leu Glu Gln Tyr Lys Asn Asn Trp Leu Ile
 1010 1015 1020
 Leu Gln Gln Gln Asp
 1025

<210> 18
 <211> 502
 <212> PRT
 <213> *Saccharomyces cerevisiae*

<400> 18
 Met Leu Ser Asp Cys Leu Leu Asn Asn Phe Arg Ile Thr Ala Gln Ile
 1 5 10 15
 Gly Ser Gly Ala Tyr Gly Leu Val Phe His Val Val Asp Ile Leu Thr
 20 25 30
 Ser Arg Glu Tyr Ala Val Lys Thr Val Phe Lys Ser Ser Ser Met Asp
 35 40 45
 Glu Phe Tyr Asn Lys Asn Gly Leu Asn Asn Asn Ser Gln Val Ala Arg
 50 55 60
 Thr Thr Leu Leu Gln Thr Gln Leu Tyr His Phe Phe Lys Ser Phe Gln
 65 70 75 80
 Lys Lys Leu Phe Leu Pro Ser Val Asp Leu Asp Ser Ile Leu Gln Leu
 85 90 95
 Thr Glu Asn Glu Leu Asn Arg Leu Pro His Tyr Arg Glu Ile Ala Phe
 100 105 110
 Gln Leu Arg Val Gln Ser His Gly Asn Ile Val Lys Ile His Gln Val
 115 120 125
 Leu Glu Ser Ser Ile Ala Thr Phe Ile Val Met Asp Tyr Tyr Asp Arg
 130 135 140
 Asp Leu Phe Thr Ser Ile Val Asp Asp Lys His Phe Val Asn His Gly
 145 150 155 160
 Ile Leu Ile Lys Lys Val Phe Leu Gln Leu Cys Ser Ala Leu Asp His
 165 170 175

Cys	His	Arg	Leu	Gly	Ile	Tyr	His	Cys	Asp	Ile	Lys	Pro	Glu	Asn	Val	180	185	190
Leu	Leu	Asp	Arg	Asn	Asp	Asn	Ala	Tyr	Leu	Cys	Asp	Phe	Gly	Leu	Ser	195	200	205
Thr	Lys	Ser	Lys	Tyr	Leu	Ala	Pro	Asn	Val	Cys	Val	Gly	Ser	Ser	Tyr	210	215	220
Tyr	Met	Ala	Pro	Glu	Arg	Ile	Leu	Tyr	Cys	Leu	Asn	Thr	Thr	Thr	Asn	225	230	235
Gly	Ile	His	Val	Asp	Glu	Cys	Cys	Ser	Ser	Leu	Pro	Thr	Asp	Thr	Gly	245	250	255
Asp	Ile	Trp	Ser	Leu	Gly	Ile	Ile	Leu	Ile	Asn	Leu	Thr	Cys	Ile	Arg	260	265	270
Asn	Pro	Trp	Leu	Lys	Ala	His	Gln	Lys	Glu	Asp	Asn	Thr	Phe	Gln	His	275	280	285
Phe	Ala	Asn	Asp	Asn	Asn	Val	Leu	Lys	Lys	Ile	Leu	Pro	Ile	Ser	Asp	290	295	300
Glu	Leu	Phe	Thr	Val	Leu	Thr	Lys	Ile	Leu	Gln	Leu	Asn	Pro	Tyr	Thr	305	310	315
Arg	Ile	Asp	Met	Lys	Thr	Leu	Met	Ser	Glu	Val	Ser	Ser	Leu	Thr	Ser	325	330	335
Phe	Thr	Arg	Glu	Gly	Pro	Leu	Ser	Gln	Val	Pro	Ile	Leu	Ser	Ser	Glu	340	345	350
Val	Tyr	Met	Thr	His	Ile	Ile	Arg	Asn	Glu	Asn	Leu	Phe	Leu	Ser	Asp	355	360	365
Leu	Ser	His	Phe	Ser	Ala	Asp	Gln	Glu	Gln	Gln	Gln	Gln	Gln	Gln	Gln	370	375	380
Gln	Gln	Gln	Gln	Val	Gln	Glu	Gln	Glu	Gln	Glu	Gln	Lys	Gln	Glu	Gln	385	390	395
Ile	Gln	Asn	Gln	Glu	Gln	Ala	Gln	Gln	Gln	Gln	Glu	Glu	Glu	Asp	Ala	405	410	415
Glu	Pro	Glu	Ser	Asp	Ile	Pro	Ser	Thr	Tyr	Asn	Ser	Asp	Gly	Ser	Met	420	425	430
Glu	Lys	Tyr	Glu	Tyr	Thr	Asn	Asn	His	Asn	Asn	Ser	Thr	Phe	Leu	Thr	435	440	445
Ser	Ser	Met	Asp	Ser	Thr	Pro	Tyr	Gln	Ser	Asp	Ile	Asp	Asp	Val	Ser	450	455	460
Ala	Ser	Lys	Asp	Cys	Lys	Phe	Gln	Gln	Asp	Thr	Leu	Arg	Asn	Arg	Leu	465	470	475

Leu Cys Leu Gln Met Asn Phe Ser Thr Leu Thr Asp Gly Pro Asn Glu
485 490 495

Lys Trp Leu Pro Asp Tyr
500

<210> 19

<211> 461

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 19

Met Met Met Phe His Asn Cys Arg Ile Asn Asn Tyr Leu Ile Thr Ser
1 5 10 15

Gln Ile Gly Glu Gly Ala Tyr Gly Leu Val Tyr Arg Ala Leu Asp Ile
20 25 30

Arg Thr Asp Arg Gln Tyr Ala Ile Lys Ala Val Val Gln Ser Tyr Gly
35 40 45

Val Ser Lys Glu Ala Asp Met Gly Asn Asp Lys Ile His Lys Asn Ser
50 55 60

Val	Lys	Leu	Gln	Lys	Lys	Leu	Ala	Lys	Leu	Phe	Lys	Glu	Ser	Lys	Asn
65					70					75					80

Val Val Arg Val Pro Ser Ile Asp Leu Glu Ser Ile Glu Asn Met Ser
85 90 95

Glu Glu Asp Phe Lys Lys Leu Pro His Tyr Lys Glu Ile Ser Leu His
100 105 110

Leu Arg Val His His His Lys Asn Ile Val Thr Ile His Glu Val Leu
115 120 125

Gln Ser Ala Val Cys Thr Phe Ile Val Met Asp Tyr Tyr Pro Thr Asp
130 135 140

Leu Phe Thr Ser Ile Val Asp Asn Arg His Phe Val Thr Asn Gly Leu
145 150 155 160

Leu Val Lys Lys Val Phe Leu Gln Ile Cys Ser Ala Leu Asn Tyr Cys
165 170 175

His Glu His Gly Ile Tyr His Cys Asp Ile Lys Pro Glu Asn Leu Leu
180 185 190

Leu Asp Thr Glu Asp Asn Val Phe Leu Cys Asp Phe Gly Leu Ser Thr
195 200 205

Thr Ser Thr Tyr Ile Lys Pro Asn Val Cys Ile Gly Ser Ser Tyr Tyr
210 215 220

Met Pro Pro Glu Arg Ile Ser Phe Asp Gly Arg Val Ser Ser Ser Lys
225 230 235 240

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<400> 20
Met Met Arg Glu Asn Pro Glu Leu Leu Leu Gly Gln Val Leu Gly Asp
 1              5              10              15

Ser Leu Arg Phe Val Ser Ile Ile Gly Ala Gly Ala Tyr Gly Val Val
      20              25              30

Tyr Lys Ala Glu Asp Ile Tyr Asp Gly Thr Leu Tyr Ala Val Lys Ala
      35              40              45

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Leu	Cys	Lys	Asp	Gly	Leu	Asn	Glu	Lys	Gln	Lys	Lys	Leu	Gln	Ala	Arg	50	55	60
Glu	Leu	Ala	Leu	His	Ala	Arg	Val	Ser	Ser	His	Pro	Tyr	Ile	Ile	Thr	65	70	75
Leu	His	Arg	Val	Leu	Glu	Thr	Glu	Asp	Ala	Ile	Tyr	Val	Val	Leu	Gln	85	90	95
Tyr	Cys	Pro	Asn	Gly	Asp	Leu	Phe	Thr	Tyr	Ile	Thr	Glu	Lys	Lys	Val	100	105	110
Tyr	Gln	Gly	Asn	Ser	His	Leu	Ile	Lys	Thr	Val	Phe	Leu	Gln	Leu	Ile	115	120	125
Ser	Ala	Val	Glu	His	Cys	His	Ser	Val	Gly	Ile	Tyr	His	Arg	Asp	Leu	130	135	140
Lys	Pro	Glu	Asn	Ile	Met	Val	Gly	Asn	Asp	Val	Asn	Thr	Val	Tyr	Leu	145	150	155
Ala	Asp	Phe	Gly	Leu	Ala	Thr	Thr	Glu	Pro	Tyr	Ser	Ser	Asp	Phe	Gly	165	170	175
Cys	Gly	Ser	Leu	Phe	Tyr	Met	Ser	Pro	Glu	Cys	Gln	Arg	Glu	Val	Lys	180	185	190
Lys	Leu	Ser	Ser	Leu	Ser	Asp	Met	Leu	Pro	Val	Thr	Pro	Glu	Pro	Ile	195	200	205
Glu	Ser	Gln	Ser	Ser	Ser	Phe	Ala	Thr	Ala	Pro	Asn	Asp	Val	Trp	Ala	210	215	220
Leu	Gly	Ile	Ile	Leu	Ile	Asn	Leu	Cys	Cys	Lys	Arg	Asn	Pro	Trp	Lys	225	230	235
Arg	Ala	Cys	Ser	Gln	Thr	Asp	Gly	Thr	Tyr	Arg	Ser	Tyr	Val	His	Asn	245	250	255
Pro	Ser	Thr	Leu	Leu	Ser	Ile	Leu	Pro	Ile	Ser	Arg	Glu	Leu	Asn	Ser	260	265	270
Leu	Leu	Asn	Arg	Ile	Phe	Asp	Arg	Asn	Pro	Lys	Thr	Arg	Ile	Thr	Leu	275	280	285
Pro	Glu	Leu	Ser	Thr	Leu	Val	Ser	Asn	Cys	Lys	Asn	Leu	Thr	Arg	Arg	290	295	300
Leu	Arg	Pro	Ala	Pro	Leu	Val	Ser	Ser	Arg	Tyr	Leu	Ala	Tyr	Gln	Gln	305	310	315
Gln	Gln	Gln	Gln	Gln	Gln	Met	Asn	Leu	Gln	Gln	Gly	Ile	Gln	Gly	Tyr	325	330	335
Pro	His	Gln	Gly	Tyr	Met	Pro	Thr	Gln	Asn	Ile	Gly	Phe	Pro	Trp	Pro	340	345	350

Pro Thr Pro Gln Phe Val Ser Asn Trp Asn His Cys Ala Thr Pro Thr
 355 360 365

Ile Pro Val Ser Leu Gln Val Leu Thr Pro Asn Ser Ser Leu Lys Val
 370 375 380

Asp Pro Thr Thr Pro Leu Thr Ala Pro Ile His Ala Thr Glu Ser Phe
 385 390 395 400

Trp Pro Ser Ala Ala Ala Ala Ala Ala Val His Asn Asn Ala Asn
 405 410 415

Ser Tyr Met Pro Ile Thr Pro Thr Pro Tyr Pro Asn Asn Ala Lys Ile
 420 425 430

Phe Gly Tyr Pro Asn Gln Pro Pro Leu Thr Pro Ile Pro Phe Thr Gly
 435 440 445

Phe Val Leu His Pro Ala Pro Val Gly Arg Ala Ala Asp Ala Val Asp
 450 455 460

Pro Ser Arg Lys Ser Leu
 465 470

<210> 21
 <211> 474
 <212> PRT
 <213> Schizosaccharomyces pombe

<400> 21
 Met Lys Leu Leu Gln Lys Lys Gly Tyr Lys Val Glu Arg Pro Leu Asn
 1 5 10 15

Lys Gly Ser Tyr Gly Thr Val Val Leu Ala His Arg Leu Phe Arg Thr
 20 25 30

Pro Arg Cys Lys Asp Leu Lys Tyr Ala Ile Lys Cys Ile Lys Lys Pro
 35 40 45

Ala Tyr Thr Phe Leu Gln Glu Val Asn Ile Leu Arg Gln Leu Ser Arg
 50 55 60

Ser Arg His Arg Asn Ile Ile His Phe Val Glu Ser Phe Glu Asp Asn
 65 70 75 80

Val Tyr Tyr Tyr Val Val Leu Glu Tyr Cys Pro Leu Gly Asp Leu Tyr
 85 90 95

Glu Cys Ile Leu Asn Asn Asp Phe Pro Asn Ala Lys Asn Gln Pro Glu
 100 105 110

Met Ile Lys Asn Ile Phe Leu Gln Ile Ile Asp Gly Val Ala His Leu
 115 120 125

His Ser His Gly Ile Tyr His Arg Asp Leu Lys Pro Glu Asn Phe Leu
 130 135 140

Leu	Ser	Leu	Ser	Glu	Asp	Gly	Ser	Glu	Leu	Val	Val	Lys	Ile	Ser	Asp	145	150	155	160
Phe	Gly	Leu	Ala	Cys	Arg	Asp	Lys	Ile	Ser	Tyr	Asp	Phe	Gly	Thr	Gly	165	170		175
Ser	Asp	Arg	Tyr	Met	Ala	Pro	Glu	Gln	Phe	Glu	Glu	Val	Asp	Gly	Ala	180	185		190
Gly	Tyr	Ser	Pro	Arg	Ala	Ala	Asp	Ile	Trp	Ala	Leu	Gly	Ile	Cys	Leu	195	200		205
Leu	Asn	Leu	Ile	Phe	Ala	Arg	Asn	Pro	Phe	Thr	Tyr	Pro	His	Glu	Lys	210	215		220
Asp	Pro	Ile	Phe	Ala	Asp	Tyr	Met	Leu	Asp	Ala	Met	Thr	Leu	Phe	Asp	225	230		235
Val	Phe	Pro	Thr	Leu	Ser	Gln	Asp	Thr	Tyr	Asn	Val	Leu	Arg	Ala	Cys	245	250		255
Leu	Cys	Val	Ser	Pro	Glu	Lys	Arg	Ser	Leu	Ala	Lys	Thr	Arg	Glu	Ala	260	265		270
Val	Leu	Ala	Val	Thr	Lys	Trp	Thr	Thr	Asp	Asp	Glu	Glu	Leu	Glu	Ser	275	280		285
Phe	Val	Asn	Glu	Glu	Glu	Glu	Phe	Arg	Ala	Ser	Asp	Phe	Met	Pro	Ala	290	295		300
Glu	Asp	Asn	Val	Arg	Cys	Thr	Gln	Ser	Asp	Arg	Glu	Pro	Leu	Arg	Thr	305	310		315
Pro	Ser	Val	Leu	Thr	Pro	Ala	Asn	Thr	Ile	Gln	Arg	Gly	Leu	Leu	Pro	325	330		335
Ser	Lys	Leu	Pro	Ala	Leu	Ser	Asp	Val	Asp	Glu	Asn	Ile	Ser	Thr	Ser	340	345		350
Ser	Ser	Pro	Arg	Ser	Pro	Ala	Ser	Leu	Ala	Pro	Val	Asn	Asn	Ser	Glu	355	360		365
Arg	Ser	Tyr	Asp	Ser	Gly	Leu	Gly	Glu	Ser	Leu	Asn	Asn	Met	His	Ile	370	375		380
Gly	Lys	Ser	Ile	Ala	Thr	Ala	Val	Pro	Val	Asn	Thr	Lys	Arg	Ser	Pro	385	390		395
Tyr	Ser	Cys	Ser	Ala	Pro	Ala	Ile	Val	Phe	Pro	Asn	Ser	Ile	Lys	Gly	405	410		415
Asn	Lys	Asp	His	Leu	Lys	Phe	Gly	Arg	Ser	Trp	Cys	Asp	Met	Asp	Glu	420	425		430
Glu	Asp	Glu	Glu	Asp	Ile	Val	Ser	Phe	Gly	Ser	Asn	Asp	Asp	Phe	Gly	435	440		445

Ala Ser Asp Glu Leu Ser Ser Lys His Ile Gly Leu Ala Asp Asp Trp
 450 455 460

Asn Val Leu Ser Gln Trp Asn Asp Asn Ser
 465 470

<210> 22

<211> 413

<212> PRT

<213> *Pichia jadinii*

<400> 22

Met Thr His Thr Asp Ile Thr Gly Ser Leu Ile Asn Glu Tyr Arg Ile
 1 5 10 15

Val Lys Leu Ile Gly Ser Gly Ala Tyr Gly Leu Val Tyr Gln Ala Gln
 20 25 30

Asn Thr Val Thr Gly Gln Gln Val Ala Ile Lys Cys Ile Ser Lys Lys
 35 40 45

Ser Asn Pro Ser Val Lys Lys Gln Ser Asp Tyr Leu Thr Thr Leu Leu
 50 55 60

Ala Glu His Leu Leu Glu Arg Asp Phe Ser Leu Gln Gly Leu Arg Glu
 65 70 75 80

Met Ser Leu Lys Arg Leu Ser Met Ala Asp Asn Ile Pro Cys Pro Phe
 85 90 95

Val Arg Glu Ile Ser Ile His Leu Gln Val His Gln His Pro Asn Val
 100 105 110

Ile Ser Ile His Lys Ile Leu Asp Ser Gln Val Ala Val Phe Val Val
 115 120 125

Met Asp Tyr Tyr Pro Glu Gly Asp Leu Phe Val Asn Ile Val Asp Arg
 130 135 140

Gln Val Tyr Ala Arg Ser Ser Gly Leu Ile Lys Asp Val Phe Ile Gln
 145 150 155 160

Leu Ile Asp Val Ile Ser Tyr Cys His Ser Lys Gly Ile Tyr His Cys
 165 170 175

Asp Ile Lys Pro Glu Asn Ile Met Cys Ala Asn Lys Gly Ser Lys Val
 180 185 190

Val Ile Gly Asp Phe Gly Leu Ala Val Lys Ser Lys Tyr Ile Gln Ser
 195 200 205

Lys Thr Cys Ile Gly Ser Ser Tyr Tyr Met Ala Pro Glu Arg Leu Cys
 210 215 220

Thr Met Asn His Ser Leu Thr Arg Leu Glu Tyr Pro Ala Cys Lys Gly
 225 230 235 240

Asp Ile Trp Ser Leu Gly Val Ile Leu Ile Asn Phe Cys Cys Thr Arg
 245 250 255
 Asn Pro Trp Met Lys Ala Cys Glu Lys Asp Ala Thr Tyr Ser Ala Phe
 260 265 270
 Lys Lys Asp Pro Lys Ile Leu Met Glu Ile Leu Asp Ile Ser Glu Glu
 275 280 285
 Leu Trp Asn Ile Leu Cys Asp Cys Phe Arg Glu Glu Pro Glu Glu Arg
 290 295 300
 Ile Ser Leu Phe Glu Leu Arg Asp Arg Val Leu Lys Cys Arg Ser Phe
 305 310 315 320
 Thr Val Ala Gly Pro Leu Ser Arg Cys Asp Ser Tyr Glu Gln Asp Met
 325 330 335
 Asp Asp Ala Leu Glu Cys Ala Val Pro Ala Asn Glu Ser Ser Val Gly
 340 345 350
 Ser Asn Gly Ser Leu Asp Leu Pro Met Asp His Ile Ile Glu Tyr Ala
 355 360 365
 Gln Tyr Leu Gln Thr Leu Ser Ser Val Lys Asn Thr Ala Ala Gly Asn
 370 375 380
 Tyr Thr Gln Asn Gln Phe Val Leu Asp Asn Asn Ile Met Asp Asn Val
 385 390 395 400
 Ser Ile Met Ser Asn Lys Ser Phe Asn Met Asn Phe Ala
 405 410

<210> 23

<211> 506

<212> PRT

<213> Nectria haematococca

<400> 23

Met Gln His His Ala Ile Phe Gly Tyr Gln Thr Pro Pro Ala Ser Pro
 1 5 10 15
 Gly Phe Asp Asn Pro Lys Cys Thr Ile Gln Gln Pro Phe Ala Val Pro
 20 25 30
 Arg His Tyr Pro Thr Arg Pro Leu Ala Pro Glu Glu Arg Leu Gly Arg
 35 40 45
 Val Leu Glu Gly Thr Leu Gln Leu Thr Glu Ile Leu Gly Thr Gly Ala
 50 55 60
 Tyr Gly Val Val Tyr Leu Ala Val Asp Leu Lys Thr Gly Gly Lys Tyr
 65 70 75 80
 Ala Val Lys Cys Leu Ser Lys Phe Asn Ala Asp Gly Thr Gln Leu Glu
 85 90 95

Pro	Arg	Gln	Phe	Ala	Tyr	Gln	Gln	Arg	Glu	Ile	Arg	Leu	His	Trp	Lys	100	105	110
Ala	Ser	Asn	His	Ala	Asn	Val	Val	Gln	Met	Leu	Lys	Ile	Val	Asn	Asp	115	120	125
Pro	Asp	Cys	Ile	Tyr	Val	Ile	Leu	Glu	Tyr	Cys	Pro	Glu	Gly	Asp	Leu	130	135	140
Phe	Leu	Asn	Ile	Thr	Glu	Arg	Gly	Gln	Tyr	Val	Gly	Lys	Asp	Glu	Leu	145	150	155
Ser	Arg	Asn	Ile	Phe	Leu	Gln	Ile	Leu	Asp	Ala	Val	Glu	His	Cys	His	165	170	175
Asn	Leu	Gly	Ile	Tyr	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Ile	Leu	Val	180	185	190
Thr	Asp	Arg	Gly	Asp	Thr	Val	Lys	Leu	Ala	Asp	Phe	Gly	Leu	Ala	Thr	195	200	205
Ser	Asp	Asp	Arg	Ser	Glu	Asp	Tyr	Gly	Cys	Gly	Ser	Thr	Phe	Tyr	Met	210	215	220
Ser	Pro	Glu	Cys	Leu	Asp	Pro	Ser	Ala	Arg	Lys	Pro	Tyr	Tyr	Met	Cys	225	230	235
Ala	Pro	Asn	Asp	Val	Trp	Ser	Leu	Gly	Val	Ile	Leu	Val	Asn	Leu	Thr	245	250	255
Cys	Gly	Arg	Asn	Pro	Trp	Lys	Gln	Ala	Ser	Phe	Gln	Asp	Ser	Thr	Tyr	260	265	270
Arg	Ala	Tyr	Ala	Gly	Ser	Lys	Asp	Phe	Leu	Lys	Thr	Ile	Leu	Pro	Leu	275	280	285
Ser	Asp	Glu	Leu	Asn	Glu	Ile	Leu	Gly	Arg	Ile	Phe	Glu	Pro	Asn	Pro	290	295	300
Glu	Gln	Arg	Ile	Thr	Leu	Asn	Glu	Leu	Arg	Thr	Arg	Ile	Met	Ala	Cys	305	310	315
Ser	Arg	Phe	Thr	Met	Pro	Ala	Val	Ser	Pro	Pro	Thr	Pro	Pro	Ala	Ser	325	330	335
Pro	Asp	His	Thr	Thr	Gln	Tyr	Val	Ser	Thr	Glu	Asp	Ala	Ile	Ile	Asp	340	345	350
Asp	Tyr	Asp	Tyr	Asp	Ser	Pro	Leu	Ser	Pro	Ala	Ser	Ser	Ser	Asp	Asp	355	360	365
Glu	Gly	Ser	Leu	Thr	Ser	Ser	Gly	Ser	Thr	Ile	Asp	Asp	Leu	Asp	Asp	370	375	380
Asp	Phe	Asp	Gln	Glu	Arg	Gln	Met	Pro	Gln	Thr	Pro	Pro	Glu	Tyr	Ala	385	390	395
																		400

Pro His Ala Phe Asp Pro Glu Glu Pro Lys Glu His Gln Leu Ile Tyr
 405 410 415

His Ser Gln Glu Phe Val Pro Gln Lys Tyr Ser Gly Pro Val Pro Val
 420 425 430

Pro Val Gln Val Pro Val Gly Val Pro Pro Gln Pro Met Leu Cys Gln
 435 440 445

Pro Val Pro Val Pro Ile Gln Ala Pro Val Pro Ile Gln Ala Pro Cys
 450 455 460

Gln Gln His Lys Ser Tyr Phe Pro Ile Trp Asp Met Val Lys Tyr Val
 465 470 475 480

Gln His Val Pro Ile Leu Gln His His Ile Pro Phe His Gln Gln Val
 485 490 495

Pro Phe Met Pro Thr Phe Gln Gly Cys Tyr
 500 505

<210> 24
 <211> 315
 <212> PRT
 <213> Candida albicans

<400> 24
 Asp Leu Cys Tyr Ala Asn Ser Ile Ile Asp Tyr Asn Glu Leu His Leu
 1 5 10 15

Val Leu Ile Asp Phe Gly Leu Ala Met Asp Ser Ala Thr Ile Cys Cys
 20 25 30

Asn Ser Cys Arg Gly Ser Ser Phe Tyr Met Ala Pro Glu Arg Thr Thr
 35 40 45

Asn Tyr Asn Thr His Arg Leu Ile Asn Gln Leu Ile Asp Met Asn Gln
 50 55 60

Tyr Glu Ser Ile Glu Ile Asn Gly Thr Thr Val Thr Lys Ser Asn Cys
 65 70 75 80

Lys Tyr Leu Pro Thr Leu Ala Gly Asp Ile Trp Ser Leu Gly Val Leu
 85 90 95

Phe Ile Asn Ile Thr Cys Ser Arg Asn Pro Trp Pro Ile Ala Ser Phe
 100 105 110

Asp Asn Asn Gln Asn Asn Glu Val Phe Lys Asn Tyr Met Leu Asn Asn
 115 120 125

Asn Lys Ala Val Leu Ser Lys Ile Leu Pro Ile Ser Ser Gln Phe Asn
 130 135 140

Arg Leu Leu Asp Arg Ile Phe Lys Leu Asn Pro Asn Asp Arg Ile Asp
 145 150 155 160

Leu	Pro	Thr	Leu	Tyr	Lys	Glu	Val	Ile	Arg	Cys	Asp	Phe	Phe	Lys	Asp
				165					170					175	
Asp	His	Tyr	Tyr	Tyr	Ala	Gln	His	Gln	His	His	His	Asn	His	Asn	Gln
				180				185					190		
Ile	Asn	Asn	Ala	Tyr	Asn	His	Tyr	Gln	Lys	Gln	Pro	Asn	Gln	Ala	Arg
				195			200					205			
Pro	Thr	Ala	Asn	Gln	Gln	Leu	Tyr	Thr	Pro	Pro	Glu	Thr	Thr	Thr	Tyr
				210		215					220				
Asn	Ser	Tyr	Ala	Ser	Asp	Met	Glu	Glu	Asp	Glu	Ile	Ser	Asp	Asp	Glu
				225		230				235					240
Phe	Tyr	Ser	Asp	Glu	Glu	Asp	Glu	Asp	Ile	Glu	Asp	Tyr	Glu	Glu	Glu
				245					250					255	
Glu	Glu	Glu	Tyr	Phe	Gly	Asn	Glu	Gln	Gln	Gln	Gln	Gln	Gln	Val	Thr
				260				265					270		
Thr	Val	Asn	Gly	Asn	Phe	Gly	Gln	Val	Lys	Gly	Thr	Cys	Tyr	Tyr	Asp
				275			280					285			
Thr	Lys	Thr	Lys	Thr	Thr	Thr	Tyr	Ile	Lys	Pro	Pro	Ala	Ala	Tyr	Thr
				290		295					300				
Leu	Glu	Thr	Pro	Ser	Gln	Ser	Val	Glu	Tyr	Cys					
				305		310				315					

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<210> 25
<211> 640
<212> PRT
<213> Saccharomyces cerevisiae
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<400> 25
Met Ser Pro Arg Gln Leu Ile Pro Thr Leu Ile Pro Glu Trp Ala Pro
  1                               5          10          15

Leu Ser Gln Gln Ser Cys Ile Arg Glu Asp Glu Leu Asp Ser Pro Pro
                20          25          30

Ile Thr Pro Thr Ser Gln Thr Ser Ser Phe Gly Ser Ser Phe Ser Gln
          35          40          45

Gln Lys Pro Thr Tyr Ser Thr Ile Ile Gly Glu Asn Ile His Thr Ile
      50          55          60

Leu Asp Glu Ile Arg Pro Tyr Val Lys Lys Ile Thr Val Ser Asp Gln
  65          70          75          80

Asp Lys Lys Thr Ile Asn Gln Tyr Thr Leu Gly Val Ser Ala Gly Ser
                85          90          95

Gly Gln Phe Gly Tyr Val Arg Lys Ala Tyr Ser Ser Thr Leu Gly Lys
      100          105          110

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Val	Val	Ala	Val	Lys	Ile	Ile	Pro	Lys	Lys	Pro	Trp	Asn	Ala	Gln	Gln		
		115					120					125					
Tyr	Ser	Val	Asn	Gln	Val	Met	Arg	Gln	Ile	Gln	Leu	Trp	Lys	Ser	Lys		
		130				135					140						
Gly	Lys	Ile	Thr	Thr	Asn	Met	Ser	Gly	Asn	Glu	Ala	Met	Arg	Leu	Met		
145					150					155					160		
Asn	Ile	Glu	Lys	Cys	Arg	Trp	Glu	Ile	Phe	Ala	Ala	Ser	Arg	Leu	Arg		
				165					170						175		
Asn	Asn	Val	His	Ile	Val	Arg	Leu	Ile	Glu	Cys	Leu	Asp	Ser	Pro	Phe		
			180					185					190				
Ser	Glu	Ser	Ile	Trp	Ile	Val	Thr	Asn	Trp	Cys	Ser	Leu	Gly	Glu	Leu		
		195					200						205				
Gln	Trp	Lys	Arg	Asp	Asp	Asp	Glu	Asp	Ile	Leu	Pro	Gln	Trp	Lys	Lys		
		210				215					220						
Ile	Val	Ile	Ser	Asn	Cys	Ser	Val	Ser	Thr	Phe	Ala	Lys	Lys	Ile	Leu		
225					230					235					240		
Glu	Asp	Met	Thr	Lys	Gly	Leu	Glu	Tyr	Leu	His	Ser	Gln	Gly	Cys	Ile		
				245					250					255			
His	Arg	Asp	Ile	Lys	Pro	Ser	Asn	Ile	Leu	Leu	Asp	Glu	Glu	Glu	Lys		
			260					265					270				
Val	Ala	Lys	Leu	Ser	Asp	Phe	Gly	Ser	Cys	Ile	Phe	Thr	Pro	Gln	Ser		
		275					280					285					
Leu	Pro	Phe	Ser	Asp	Ala	Asn	Phe	Glu	Asp	Cys	Phe	Gln	Arg	Glu	Leu		
		290				295					300						
Asn	Lys	Ile	Val	Gly	Thr	Pro	Ala	Phe	Ile	Ala	Pro	Glu	Leu	Cys	His		
305					310					315					320		
Leu	Gly	Asn	Ser	Lys	Arg	Asp	Phe	Val	Thr	Asp	Gly	Phe	Lys	Leu	Asp		
				325					330					335			
Ile	Trp	Ser	Leu	Gly	Val	Thr	Leu	Tyr	Cys	Leu	Leu	Tyr	Asn	Glu	Leu		
			340					345					350				
Pro	Phe	Phe	Gly	Glu	Asn	Glu	Phe	Glu	Thr	Tyr	His	Lys	Ile	Ile	Glu		
		355					360					365					
Val	Ser	Leu	Ser	Ser	Lys	Ile	Asn	Gly	Asn	Thr	Leu	Asn	Asp	Leu	Val		
		370				375					380						
Ile	Lys	Arg	Leu	Leu	Glu	Lys	Asp	Val	Thr	Leu	Arg	Ile	Ser	Ile	Gln		
385					390					395					400		
Asp	Leu	Val	Lys	Val	Leu	Ser	Arg	Asp	Gln	Pro	Ile	Asp	Ser	Arg	Asn		
				405					410					415			

His Ser Gln Ile Ser Ser Ser Ser Val Asn Pro Val Arg Asn Glu Gly
 420 425 430
 Pro Val Arg Arg Phe Phe Gly Arg Leu Leu Thr Lys Lys Gly Lys Lys
 435 440 445
 Lys Thr Ser Gly Lys Gly Lys Asp Lys Val Leu Val Ser Ala Thr Ser
 450 455 460
 Lys Val Thr Pro Ser Ile His Ile Asp Glu Glu Pro Asp Lys Glu Cys
 465 470 475 480
 Phe Ser Thr Thr Val Leu Arg Ser Ser Pro Asp Ser Ser Asp Tyr Cys
 485 490 495
 Ser Ser Leu Gly Glu Glu Ala Ile Gln Val Thr Asp Phe Leu Asp Thr
 500 505 510
 Phe Cys Arg Ser Asn Glu Ser Leu Pro Asn Leu Thr Val Asn Asn Asp
 515 520 525
 Lys Gln Asn Ser Asp Met Lys Thr Asp Arg Ser Glu Ser Ser Ser His
 530 535 540
 Ser Ser Leu Lys Ile Pro Thr Pro Ile Lys Ala Met Ile Arg Leu Lys
 545 550 555 560
 Ser Ser Pro Lys Glu Asn Gly Asn Arg Thr His Ile Asn Cys Ser Gln
 565 570 575
 Asp Lys Pro Ser Ser Pro Leu Met Asp Arg Thr Val Gly Lys Arg Thr
 580 585 590
 Val Asn Asn Ser Gly Ala Arg Lys Leu Ala His Ser Ser Asn Ile Leu
 595 600 605
 Asn Phe Lys Ala Tyr Ile Asn Ser Glu Asp Ser Asp Ile Arg Glu Thr
 610 615 620
 Val Glu Asp Val Lys Thr Tyr Leu Asn Phe Ala Asp Asn Gly Gln Ile
 625 630 635 640

<210> 26

<211> 1142

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 26

Met Asp Arg Ser Asp Lys Lys Val Asn Val Glu Glu Val Asn Val Pro
 1 5 10 15
 Ser Asn Leu Gln Ile Glu Leu Glu Lys Ser Gly Thr Ser Ser Ser Val
 20 25 30
 Ser Leu Arg Ser Pro Thr Lys Ser Ser Ala Thr Asn Leu Ala Gly Met
 35 40 45

Ala	Glu	Gly	Ala	Arg	Asp	Asn	Ala	Ser	Ile	Ala	Ser	Ser	Ser	Val	Asp	50	55	60
Ser	Leu	Asn	Met	Leu	Leu	Glu	Arg	Gln	Arg	Val	Arg	Gln	Leu	Asn	His	65	70	75
Pro	Gln	His	Gln	Gln	His	Ile	Ser	Ser	Ser	Leu	Ala	Lys	Thr	Pro	Thr	85	90	95
Thr	Thr	Ser	Ser	Phe	Cys	Ser	Ser	Gly	Ser	Ser	Lys	Asn	Lys	Val	Lys	100	105	110
Glu	Thr	Asn	Arg	Ile	Ser	Leu	Thr	Tyr	Asp	Pro	Val	Ser	Lys	Arg	Lys	115	120	125
Val	Leu	Asn	Thr	Tyr	Glu	Ile	Ile	Lys	Glu	Leu	Gly	His	Gly	Gln	His	130	135	140
Gly	Lys	Val	Lys	Leu	Ala	Arg	Asp	Ile	Leu	Ser	Lys	Gln	Leu	Val	Ala	145	150	155
Ile	Lys	Ile	Val	Asp	Arg	His	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Phe	Thr	165	170	175
Phe	Ile	Lys	Ser	Ser	Lys	Ile	Ser	Glu	Asn	Asp	Lys	Ile	Lys	Arg	Glu	180	185	190
Ile	Ala	Ile	Met	Lys	Lys	Cys	His	His	Lys	His	Val	Val	Gln	Leu	Ile	195	200	205
Glu	Val	Leu	Asp	Asp	Leu	Lys	Ser	Arg	Lys	Ile	Tyr	Leu	Val	Leu	Glu	210	215	220
Tyr	Cys	Ser	Arg	Gly	Glu	Val	Lys	Trp	Cys	Pro	Pro	Asp	Cys	Met	Glu	225	230	235
Ser	Asp	Ala	Lys	Gly	Pro	Ser	Leu	Leu	Ser	Phe	Gln	Glu	Thr	Arg	Glu	245	250	255
Ile	Leu	Arg	Gly	Val	Val	Leu	Gly	Leu	Glu	Tyr	Leu	His	Tyr	Gln	Gly	260	265	270
Ile	Ile	His	Arg	Asp	Ile	Lys	Pro	Ala	Asn	Leu	Leu	Ile	Ser	Gly	Asp	275	280	285
Gly	Thr	Val	Lys	Ile	Ser	Asp	Phe	Gly	Val	Ser	Leu	Ala	Ala	Ser	Ser	290	295	300
Thr	Asn	Ser	Ser	Asp	Ser	Ser	Glu	Ser	Leu	Asp	Glu	Leu	Glu	Leu	Ala	305	310	315
Lys	Thr	Val	Gly	Thr	Pro	Ala	Phe	Phe	Ala	Pro	Glu	Met	Cys	Leu	Gly	325	330	335
Glu	Asp	Ala	Phe	Thr	Arg	Tyr	Asn	Leu	Thr	Lys	Glu	Asn	Leu	Phe	Arg	340	345	350

Gly	Ser	Cys	Ile	Ser	Phe	Met	Ile	Asp	Ile	Trp	Ala	Val	Gly	Val	Thr	355	360	365
Leu	Tyr	Cys	Leu	Leu	Phe	Gly	Met	Leu	Pro	Phe	Phe	Ser	Asp	Phe	Glu	370	375	380
Leu	Lys	Leu	Phe	Glu	Lys	Ile	Val	Asn	Asp	Pro	Leu	Lys	Phe	Pro	Thr	385	390	395
Phe	Lys	Glu	Ile	Gln	Ser	Asn	Lys	Val	Ser	Lys	Val	Ser	Cys	Glu	Glu	405	410	415
Glu	Tyr	Glu	Met	Ala	Lys	Asp	Leu	Leu	Leu	Lys	Leu	Leu	Glu	Lys	Asn	420	425	430
Pro	Gln	Lys	Arg	Met	Thr	Ile	Pro	Ala	Ile	Lys	Lys	His	Pro	Phe	Val	435	440	445
Ser	Trp	Asp	Phe	Asp	His	Val	Pro	Glu	Asn	Asp	Glu	Lys	Leu	Leu	Ser	450	455	460
Ser	Val	Leu	Glu	Gln	Lys	Leu	Arg	Phe	Gln	Cys	Asn	Gln	Thr	Asp	Gln	465	470	475
Phe	Glu	Pro	Ile	Ser	Ile	Ser	Lys	His	Glu	Leu	Lys	Asn	Ala	Val	Ser	485	490	495
Gly	Val	Gly	Lys	Lys	Ile	Lys	Glu	Ser	Val	Leu	Lys	Ser	Ile	Pro	Leu	500	505	510
Lys	Asp	Pro	Ser	Asp	Leu	Ser	Asn	Lys	Asn	Tyr	Leu	His	Pro	Thr	Glu	515	520	525
Thr	Thr	Arg	Gly	Arg	Gly	Asp	Ala	Asn	Val	Ile	Val	Ser	Glu	Gly	Ser	530	535	540
Val	Leu	Ser	Asn	Ile	Lys	Glu	Leu	Ser	Ala	Asn	Asp	Gly	Cys	Leu	Asn	545	550	555
Thr	Asp	Ser	Asp	Thr	Asn	Ile	Asn	Ile	Asn	Asp	Asp	Asp	His	Tyr	Ser	565	570	575
Gly	Asp	Asp	Asn	Asp	Gly	His	Leu	Thr	Lys	Arg	Glu	Leu	Glu	Arg	Glu	580	585	590
Leu	Asn	Lys	Phe	Asp	Asp	Lys	His	Glu	Ala	Gly	Asn	Met	Val	Asn	Leu	595	600	605
Pro	Ile	Asn	Ser	Ser	Phe	Ala	Ser	Leu	Asp	Ser	Phe	Tyr	Ile	Asp	Asn	610	615	620
Phe	Ala	Met	Ala	Arg	Met	Gly	Met	Ser	Ser	Pro	Glu	Ala	Gly	Asp	Ser	625	630	635
Val	Ser	Ser	Val	Pro	Asn	Leu	Pro	Ser	Ala	Pro	Ser	Ser	Thr	Arg	Leu	645	650	655

Gly	Arg	Ser	Pro	Val	Phe	Ser	Gly	Val	Thr	Asn	Gln	Pro	Ser	Pro	Ile	660	665	670
Arg	Pro	Val	Leu	Pro	Gln	Gln	Lys	Ser	Ser	Phe	Cys	Ala	Thr	Gly	Arg	675	680	685
Tyr	Asp	Lys	Ser	His	Asn	Ser	Leu	Leu	Arg	Asn	Ser	Ser	Ser	His	Leu	690	695	700
Thr	Ser	Tyr	Asn	Ser	Gly	Arg	Pro	Ser	Ser	Arg	Thr	Gly	Arg	Met	Asn	705	710	715
Ser	Arg	Asn	Gln	Asn	Leu	Pro	Lys	Ile	Pro	Asn	Ser	Leu	Ser	Lys	Ile	720	725	730
Ser	Thr	Thr	Lys	Leu	Thr	Glu	Leu	Arg	Val	Pro	Lys	Asp	Ser	Glu	Ile	735	740	745
Pro	Ser	Pro	Ala	Lys	Asn	Pro	Asn	Ala	Asp	Arg	Leu	Arg	Arg	Phe	Pro	750	755	760
Val	Lys	Lys	Asn	Thr	Lys	Thr	Pro	Ala	Ile	Lys	Asp	Pro	Pro	Arg	Ile	765	770	775
Asn	Ile	Asn	Ser	Ser	Asp	Lys	Ser	Gly	Ser	Lys	Asn	Ser	Pro	Ile	Lys	780	785	790
Ser	Leu	Tyr	Gln	Arg	Met	Lys	Gln	Ser	Lys	Asp	Asn	Ser	Lys	Thr	Phe	800	805	810
Glu	Val	Arg	Arg	Gly	Asn	Phe	Phe	Ser	His	Phe	Asn	Gly	Asp	Asp	Asp	815	820	825
Asp	Ser	Ser	Ser	Gln	Ser	Ser	Val	Thr	Ser	Ser	Gly	Ser	Glu	Ser	Asp	830	835	840
Ser	Glu	Leu	Ser	Ser	Thr	Ser	Ser	Ser	Cys	Thr	Ser	Gly	Thr	Gln	Ser	845	850	855
Arg	Asn	Ser	Ser	Asn	Asn	Asn	Ala	Tyr	Ser	Glu	Thr	Glu	Ser	Leu	Pro	860	865	870
Phe	Glu	Phe	Gly	Val	Asp	Ser	Glu	Asp	Gly	Ser	Gly	Val	Leu	Leu	Arg	875	880	885
Asp	Leu	Pro	Asn	Glu	Asp	Gln	Ile	Arg	Pro	Phe	Leu	Asp	Ile	Gln	Pro	890	900	905
Cys	Arg	Arg	Met	Lys	Val	Lys	Ser	Ser	Leu	Asn	Leu	Glu	Pro	Pro	Ser	910	915	920
Val	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asp	Glu	Asp	Glu	Leu	Ile	Leu	925	930	935
Asn	Val	Gly	Thr	Ala	Gly	His	Arg	Arg	Arg	His	Asn	Ser	Ser	Lys	Leu	940	945	950

<400> 27															
Met	Val	Leu	Leu	Lys	Glu	Pro	Val	Gln	Pro	Leu	Pro	Arg	Ser	Ser	Leu
1				5					10					15	
Leu	Tyr	Asn	Asn	Ala	Ser	Asn	Ser	Ser	Ser	Arg	Ile	Lys	Glu	Thr	Arg
			20					25					30		
Lys	Val	Lys	Leu	Leu	Tyr	Asn	Pro	Leu	Thr	Lys	Arg	Gln	Ile	Leu	Asn
		35					40					45			
Asn	Phe	Glu	Ile	Leu	Ala	Thr	Leu	Gly	Asn	Gly	Gln	Tyr	Gly	Lys	Val
	50					55					60				
Lys	Leu	Ala	Arg	Asp	Leu	Gly	Thr	Gly	Ala	Leu	Val	Ala	Ile	Lys	Ile
65					70					75					80

Leu	Asn	Arg	Phe	Glu	Lys	Arg	Ser	Gly	Tyr	Ser	Leu	Gln	Leu	Lys	Val
				85					90					95	
Glu	Asn	Pro	Arg	Val	Asn	Gln	Glu	Ile	Glu	Val	Met	Lys	Arg	Cys	His
			100					105					110		
His	Glu	Asn	Val	Val	Glu	Leu	Tyr	Glu	Ile	Leu	Asn	Asp	Pro	Glu	Ser
		115					120					125			
Thr	Lys	Val	Tyr	Leu	Val	Leu	Glu	Tyr	Cys	Ser	Arg	Gly	Pro	Val	Lys
	130					135					140				
Trp	Cys	Pro	Glu	Asn	Lys	Met	Glu	Ile	Lys	Ala	Val	Gly	Pro	Ser	Ile
145					150					155					160
Leu	Thr	Phe	Gln	Gln	Ser	Arg	Lys	Val	Val	Leu	Asp	Val	Val	Ser	Gly
				165					170						175
Leu	Glu	Tyr	Leu	His	Ser	Gln	Gly	Ile	Thr	His	Arg	Asp	Ile	Lys	Pro
			180					185					190		
Ser	Asn	Leu	Leu	Ile	Ser	Ser	Asn	Gly	Thr	Val	Lys	Ile	Ser	Asp	Phe
		195					200					205			
Gly	Val	Ala	Met	Ser	Thr	Ala	Thr	Gly	Ser	Thr	Asn	Ile	Gln	Ser	Ser
	210					215					220				
His	Glu	Gln	Leu	Leu	Lys	Ser	Arg	Ala	Leu	Gly	Thr	Pro	Ala	Phe	Phe
225					230					235					240
Ala	Pro	Glu	Leu	Cys	Ser	Thr	Glu	Lys	Glu	Tyr	Ser	Cys	Ser	Thr	His
				245					250					255	
Glu	Ile	Trp	Ser	Leu	Gly	Val	Thr	Ile	Tyr	Cys	Leu	Leu	Phe	Gly	Lys
			260					265					270		
Leu	Pro	Phe	Asn	Ala	Asn	Ser	Gly	Leu	Glu	Leu	Phe	Asp	Ser	Ile	Ile
		275					280					285			
Asn	Lys	Pro	Leu	Glu	Phe	Pro	Ser	Tyr	Glu	Glu	Met	Leu	Asn	Gly	Ala
	290					295					300				
Thr	Ser	Gly	Ile	Thr	Met	Glu	Glu	Tyr	Thr	Asp	Ala	Lys	Asp	Leu	Leu
305					310					315					320
Lys	Lys	Leu	Leu	Gln	Lys	Asp	Pro	Asp	Lys	Arg	Ile	Lys	Leu	Ala	Asp
				325					330					335	
Ile	Lys	Val	His	Pro	Phe	Met	Cys	His	Tyr	Gly	Lys	Ser	Asp	Ala	Ala
			340					345					350		
Ser	Val	Leu	Thr	Asn	Leu	Glu	Thr	Phe	His	Glu	Leu	Lys	Val	Ser	Pro
		355					360					365			
Pro	Ser	Ser	Cys	Lys	Arg	Val	Glu	Leu	Val	Ser	Leu	Pro	Val	Asn	Ser
	370					375					380				

Ser Phe Ala Ser Leu Asp Ser Val Tyr Met Glu Asn Phe Asp His Asn
 385 390 395 400
 Asn Leu Arg Thr Gly Ala Asp Arg Asn Ser Thr Tyr Ser Pro Ser Ile
 405 410 415
 Tyr Asp Ala Asn Thr Leu Ser Pro Ser Ala Tyr His Asn Ile Gly Ser
 420 425 430
 Arg Glu Ser Ser Tyr Ser Ser Phe Ser Ser Phe Thr Ser Ser Thr Ala
 435 440 445
 Phe Ala Ser Gln Ile Ser Ile Gln Asp Ala Pro Ala Ile Gly Asp Gln
 450 455 460
 Gln Cys Leu Ile Gly Glu Ser Gly Ser Ser Leu Arg Val Asn Ser Cys
 465 470 475 480
 Glu Phe Pro Gln Tyr Thr Thr Met Ser Pro Val Gly Glu Tyr Pro Phe
 485 490 495
 Glu Ser Thr Glu Ala Ser Leu Ser Ser Thr Leu Thr Pro Val Gly Asn
 500 505 510
 Val Pro Gln Arg Ile Lys Ala His Leu Val Glu Gly Lys Ser Asn Ser
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 Lys Asp Asp Leu Arg Ile Glu Ala Asp Ala Ser Leu Val Phe Glu Ala
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 Ser Asp Ala Gln Arg Thr Arg Arg Arg Met Ser Leu Tyr Lys Leu
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 <212> PRT
 <213> Schizosaccharomyces pombe

<400> 28
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 Leu Leu Arg Lys Asn Thr Trp His Pro Glu Val Asp Asp Ser Glu Val
 20 25 30
 Pro Pro Ser Val Phe Pro Glu Tyr Pro Val His Lys Ala Ile Gln Lys
 35 40 45
 Thr Ser Asp Ser Phe Arg Lys Arg Asn Tyr Ser Ala Gly Asp Tyr Val
 50 55 60
 Ile Ala Pro Leu Gly Gly Glu Arg Glu Gly Ser Ser Leu Thr His Ser
 65 70 75 80
 Trp Thr Phe Gln Pro Gly Lys His Asn Gln Arg Leu Tyr Ser Asp Asn
 85 90 95

Phe	Gln	Glu	Ala	Gln	Arg	Gln	Trp	Lys	Arg	Leu	Gln	Glu	Trp	Gly	Glu		
			100					105					110				
Val	Lys	Glu	Thr	Lys	Lys	Ile	Arg	Lys	Arg	Phe	Asp	Arg	Phe	Ser	Gly		
		115					120					125					
Arg	Lys	Tyr	Ile	Asn	His	Tyr	Glu	Ile	Ile	Lys	Glu	Leu	Gly	Arg	Gly		
	130					135					140						
Met	His	Gly	Lys	Val	Lys	Leu	Gly	Arg	Asp	Thr	Val	Thr	Arg	Glu	Leu		
145					150					155							
Leu	Ala	Ile	Lys	Ile	Ile	Pro	Lys	Thr	Glu	Arg	Arg	Pro	Lys	Leu	Gly		
				165					170					175			
Arg	Ala	Asn	Ala	Ser	Ser	Gln	Lys	Glu	Lys	Val	Arg	Arg	Glu	Ile	Ala		
			180					185					190				
Ile	Leu	Lys	Lys	Cys	Val	His	Pro	Asn	Val	Val	Arg	Leu	Arg	Glu	Val		
		195					200					205					
Ile	Asp	Asp	Pro	Ser	Ser	Thr	Lys	Val	Tyr	Leu	Val	Leu	Glu	Tyr	Met		
	210					215					220						
Ser	Gly	Gly	Glu	Val	Pro	Trp	Thr	Asp	Cys	Asp	Ser	Pro	Val	Leu	Ser		
225					230					235					240		
Ile	Ser	Glu	Ala	Arg	Gln	Tyr	Phe	Arg	Asp	Val	Val	Leu	Gly	Leu	Glu		
			245						250					255			
Tyr	Leu	His	Tyr	Gln	Gly	Ile	Ile	His	Arg	Asp	Ile	Lys	Pro	Ala	Asn		
			260					265					270				
Leu	Leu	Leu	Asn	Ser	Ser	Asn	Cys	Val	Lys	Ile	Ser	Asp	Phe	Gly	Val		
		275					280					285					
Ser	Tyr	Ile	Ala	Asn	Ala	Gly	Leu	Asn	Glu	Asp	Asn	Asp	Val	Glu	Leu		
	290					295					300						
Ala	Lys	Thr	Val	Gly	Thr	Pro	Ala	Phe	Phe	Ala	Pro	Glu	Leu	Cys	Trp		
305					310					315					320		
Thr	Asp	Leu	Asp	Arg	Pro	Arg	Pro	Lys	Ile	Ser	Glu	Ala	Ile	Asp	Val		
				325					330					335			
Trp	Ala	Leu	Gly	Val	Thr	Leu	Phe	Cys	Leu	Leu	Phe	Gly	Arg	Cys	Pro		
			340					345					350				
Phe	Asn	Ala	Ser	Met	Glu	Tyr	Glu	Leu	Phe	Asp	Lys	Ile	Val	Asn	Glu		
		355					360					365					
Arg	Leu	Asn	Ile	Pro	Ser	Thr	Pro	Asp	Ile	Gly	Glu	Glu	Gly	Arg	Asp		
	370					375					380						
Leu	Leu	Lys	Arg	Leu	Leu	Cys	Lys	Asp	Pro	Glu	Gln	Arg	Ile	Thr	Leu		
385					390					395					400		

Val Glu Val Lys Leu His Pro Trp Thr Leu Asp Gly Leu Lys Asp Pro
 405 410 415
 Glu Lys Trp Leu Gln Asn Thr Asp Pro Ser Thr Val Ser Arg Val Glu
 420 425 430
 Val Ser Thr Asp Glu Val Ala Ser Ala Ile Ser Leu Val Gly Arg Leu
 435 440 445
 Arg Arg Lys Leu Gly Lys Leu Phe Arg Phe Arg Arg Pro Lys Ala Arg
 450 455 460
 Val Phe Asp Ser Ser Ser Ser Val Pro Ser Asp Ser Ser Ile Cys Arg
 465 470 475 480
 Pro Glu Ser Ser Gly Asn Ser Ser Ile Gly Leu Ser Ala Ser Glu Leu
 485 490 495
 Ser Asp Ser Phe Asn Arg Leu Ala Val Asn Glu Ser Gln Lys Asp Arg
 500 505 510
 Glu Arg Lys Gln Val His Pro Val Glu Met Gly Arg Asn Ser Ser Glu
 515 520 525
 Lys Lys Pro Arg Cys Asp Phe Gly Trp Asp Tyr Glu Ala Phe Pro Asn
 530 535 540
 Asp Asn Gln Asp Ala Asp Asp Ala Cys Ser Tyr Asn Thr Gly Asp Ser
 545 550 555 560
 Ile Pro Gln Val Ser Lys Ser Ile Asn Gly His Phe Glu Thr Tyr Ser
 565 570 575
 Arg Thr Ser Met Asp Thr Asp Asp Val Ala Ser Phe Glu Ser Pro Asn
 580 585 590
 Ala Lys His Glu Glu Ser Gly Met Pro Val Val Thr Phe Arg Asn Tyr
 595 600 605
 Glu Asn Tyr Asp Ala Asn Pro Ser Asn Phe His Pro Val Val Pro Gly
 610 615 620
 Phe Val Ser Ser Pro Asn Leu His Leu Ala Gly Gly Ser Asp Thr Pro
 625 630 635 640
 Ile Tyr Cys Ile Glu His Ser Phe Thr Pro Thr Asn
 645 650

<210> 29

<211> 1408

<212> PRT

<213> Candida albicans

<400> 29

Met Ser Thr Ser Leu Ser His Gln Glu Leu Ser Thr Glu Lys Gly Gln
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Ser Cys Pro Pro Ile Pro Asp Ser Asn Pro Leu Asn Pro Lys Ser Pro
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 Ala Leu Arg Thr Thr Ser Asn Ser Thr Ile Leu Asn Ser Pro Ile Glu
 35 40 45
 Thr Ile Asn Val Asn Thr Ser Ser Lys Ser Asn Ile Ser Gly Glu Ser
 50 55 60
 Thr Ile Asn Gly Ser Ala Tyr Ser Asn Ser Thr Thr Val Val Gln Pro
 65 70 75 80
 Glu Val Phe Gly Glu Ala His Thr Thr Thr Ser Thr His Asn Ser Ala
 85 90 95
 Ser Thr Arg Thr Glu Arg Asn Glu Phe Pro Asn Ser His Leu His Gln
 100 105 110
 His Gln Gln Glu Ser Arg Asn Asn Gly Glu Ser Asn Thr Pro Met Thr
 115 120 125
 Ser Pro Lys His Phe Pro Thr Asp Asp Leu Arg His Ser Leu Phe Tyr
 130 135 140
 Lys Ala Gly Ser Ala Ala His His Lys Ser Ala Thr Ser Ser Lys Gln
 145 150 155 160
 Ser Ser Thr Thr Ser Leu Lys Asp Gly Leu Asn Asn Ala Asn Thr Tyr
 165 170 175
 His Phe Gln Asn Thr Phe Leu Asp Asn Asn Val Met Ser Asp Leu Glu
 180 185 190
 Glu Ser Pro Val Pro Asn Glu Arg Asn Pro Ile Gln Asp Thr Gly Leu
 195 200 205
 Gly Pro Arg Ser His Ala Thr Lys Phe Gly Val Gln Ser Thr Thr Ser
 210 215 220
 Leu Pro Thr Thr Ile Ser Gln Ser Arg Leu Pro Asn Ser Asn Lys Ser
 225 230 235 240
 Ser Phe Phe Pro Phe Lys Ser Tyr Thr Ser Ser Pro Val Lys Glu Thr
 245 250 255
 Lys His Val Phe Leu Glu Tyr Asp Pro Ile Thr Arg Arg Lys Val Leu
 260 265 270
 Asn Thr Tyr Glu Ile Leu Arg Glu Ile Gly Lys Gly Glu His Gly Lys
 275 280 285
 Val Lys Leu Ala Arg Asp Leu Ile Asn Asn Glu Leu Val Ala Ile Lys
 290 295 300
 Ile Val Asn Arg Lys Ser Arg Lys Glu Arg Pro Ser Leu Arg Met Arg
 305 310 315 320

Lys	Asn	Ser	Ser	Ala	Pro	Val	Ile	Asn	Glu	Tyr	Glu	Leu	Lys	Val	Lys		
				325					330					335			
Arg	Glu	Ile	Ala	Ile	Met	Lys	Lys	Cys	Arg	His	Lys	His	Ile	Val	Ala		
			340					345					350				
Leu	Arg	Glu	Val	Leu	Asp	Asp	Leu	Asn	Ser	Leu	Lys	Ile	Tyr	Leu	Val		
		355					360					365					
Leu	Glu	Tyr	Met	Glu	Lys	Gly	Glu	Ile	Lys	Trp	Lys	Lys	Leu	Gln	Ser		
	370					375					380						
Asp	Val	Ala	Lys	Pro	Thr	Ala	Asn	Lys	Cys	Tyr	Asp	Ala	Asn	Asp	Asn		
385					390					395					400		
Glu	Ile	Pro	Cys	Cys	Gly	Asn	Gly	Arg	Met	Gln	Gln	Arg	Gln	Gln	Ser		
			405					410						415			
Leu	Leu	Thr	Asp	Glu	Asp	Leu	Leu	Ser	Asn	Glu	Phe	Ser	Pro	Asn	Leu		
			420					425					430				
Thr	Phe	Lys	Gln	Ser	Arg	Lys	Ile	Phe	Arg	Asp	Val	Leu	Leu	Gly	Leu		
	435					440						445					
Glu	Tyr	Leu	His	Met	Gln	Gly	Ile	Val	His	Arg	Asp	Ile	Lys	Pro	Ala		
	450					455					460						
Asn	Leu	Leu	Val	Ser	Ala	Asp	Asn	Ile	Val	Lys	Ile	Ser	Asp	Phe	Gly		
465					470					475					480		
Val	Ser	Phe	Ala	Thr	Ser	Leu	Ala	Glu	Asn	Asp	Glu	Gly	Tyr	Leu	Val		
				485					490					495			
Asn	Glu	Leu	Asp	Leu	Ala	Lys	Thr	Ala	Gly	Thr	Pro	Ala	Phe	Phe	Ala		
			500					505					510				
Pro	Glu	Leu	Cys	Gln	Phe	Asp	Asp	Glu	Thr	Ala	Thr	Glu	Lys	Leu	Ser		
	515						520					525					
Ser	Ser	Thr	Glu	Ser	Met	Ala	Pro	Pro	Lys	Ile	Asp	Tyr	Lys	Ile	Asp		
	530					535					540						
Ile	Trp	Ala	Leu	Gly	Val	Thr	Leu	Tyr	Cys	Leu	Leu	Phe	Gly	Lys	Val		
545					550					555					560		
Pro	Phe	Asn	Ala	Asp	Thr	Glu	Tyr	Asp	Leu	Phe	Gln	Val	Ile	Val	Lys		
				565					570					575			
Glu	Pro	Leu	Lys	Phe	Pro	Asn	Ser	Ile	Lys	Ala	Phe	Asn	Pro	Pro	Ala		
			580					585					590				
Thr	Val	Thr	Glu	Glu	Glu	Phe	Glu	Leu	Ala	Lys	Asp	Leu	Leu	Ser	Lys		
	595						600					605					
Met	Leu	Asp	Lys	Asn	Asn	Arg	Thr	Arg	Ile	Glu	Ile	Gln	Asp	Ile	Lys		
	610					615						620					

Glu 625	His	Pro	Phe	Thr	Leu 630	Met	Asp	Leu	Asp	Asn 635	Asp	Val	Asp	Gly	Leu 640
His	Glu	Leu	Phe	His 645	Leu	Asn	Gly	Asp	Asn 650	Pro	Val	Glu	Pro	Leu	Ser 655
Phe	Asp	Leu	Asp 660	Glu	His	Asp	Ile	Val 665	Ser	Lys	Asp	Glu	Val 670	Asp	Asn
Ala	Val	Ile	Gly 675	Val	Gly	Ala	Arg 680	Ile	Lys	Arg	Ser	Leu 685	Val	Arg	Ala
Ile	Arg 690	Ala	Gly	Gly	Leu	Lys 695	Asp	Gly	Glu	Ile	Arg 700	Asn	Lys	Phe	Ala
Ala 705	Leu	Gln	Leu	Glu	His 710	Ser	Arg	Ser	Glu	Asn 715	Ser	Glu	Glu	Ser	Ser 720
Ser	Gly	Tyr	Ser	Asn 725	Tyr	Ser	Ser	Ser	Thr 730	Arg	Leu	Leu	Gly	Tyr 735	Gln
Asn	Gly	Gln	Asn 740	Tyr	Ser	Met	Ile	Leu 745	Ser	Glu	Gly	Leu	Pro 750	Val	Ser
Ser	Ala	Thr 755	Pro	Pro	Pro	Ala	Leu 760	Leu	Ala	Ala	Gln	Gln	Lys	Arg	Ser 765
Ser 770	Leu	Leu	Ser	Pro	Lys	Ser 775	Gly	Gly	Ile	Ser	Glu 780	Lys	Asn	Asn	Pro
His 785	Phe	Pro	Ser	Ser	Leu 790	Ala	His	Gln	Ile	Pro 795	Asn	Thr	Ser	Ser	Pro 800
Ser	Thr	Cys	Ser	Ser 805	Ser	Thr	Ser	Met	Ala	Phe 810	Gln	Asn	His	Phe	Ser 815
Phe	Ala	Gly	Met 820	Arg	Glu	Ser	Gly	Lys 825	Ser	Leu	Leu	His	Asp 830	Met	Ile
Glu	Ser 835	Asn	Ser	Asn	Asn	Ser	Ser	Arg 840	Arg	Gly	Ser	Ser	Ala	Gly	Ile 845
Thr 850	Val	Ser	Glu	Ala	Pro	Gln 855	Ile	Glu	Thr	Lys 860	Arg	Asn	Val	Gly	Gly
Asp 865	Leu	Tyr	Leu	Lys	Asn 870	Gln	Ser	Val	Val	Glu 875	Thr	Phe	Lys	Gly	Ile 880
Gln	Leu	Gln	Asp	Asp 885	Lys	Arg	Arg	Arg	Ser	Ser	Ile	Phe	Ser	Leu	His 895
Ser	Gln	Ile	Gly 900	Thr	Asn	Ser	Asn	Lys 905	Ser	Ser	Leu	Ser	His 910	Glu	Leu
Thr	Pro	Thr 915	Gln	Thr	Gly	Ser	Gly	Ala 920	Ser	Thr	Gln	Gln	Gln	His	Gln

His Tyr Ser Thr Asn Tyr Ser Asn Ile Ala Ala Pro Ile Pro Val Pro
 930 935 940
 Ala Pro Arg Lys Gln Ser Thr Ser Asp Asn Glu Gln Asp Ile Lys Ala
 945 950 955 960
 Pro Leu Leu His Gln Glu Lys Asn Val Met Gly Lys Pro Tyr Leu Lys
 965 970 975
 Ile Gly Pro Ile Ser Ile Ala Arg Glu Asp Glu Lys Ser Ala Asp Asp
 980 985 990
 His Pro Asp Ser Ser Ile Ile Ser Leu Pro Leu Ser Glu Ser Phe Ala
 995 1000 1005
 Ser Leu Asp Ser Ile Asn Asp Asp Tyr Leu Ser Arg Lys Tyr Glu Glu
 1010 1015 1020
 Tyr Thr Asn Asn Arg Lys Glu Asn Ser Lys Ser Glu Gly Asn Val Pro
 1025 1030 1035 1040
 Val Ile Ser Leu Arg Arg Lys Ser Ser Leu Ser Glu Ser Asp Leu Thr
 1045 1050 1055
 Arg His Val Gln Leu Lys Asp Pro Phe Gly Lys Phe Lys Pro Asp Gly
 1060 1065 1070
 Ser Glu Ile Ala Glu Lys Phe Lys Ala Phe Asn Leu Gly Asn Leu Met
 1075 1080 1085
 Lys Thr Gly Gly Lys Phe Ala Leu Ala Glu His Asn Ser Ser Asp Ser
 1090 1095 1100
 Gln Gln Ile Lys Gly Asn Asn Tyr Gln Ser Ser Asp Asp Gly Ile Ala
 1105 1110 1115 1120
 Pro Lys Ala Ile Val Pro Ala Ile Ser Tyr Ser Ser Ser Asp Ser Tyr
 1125 1130 1135
 Ser Ser Cys Ser Ser Ser Ser Phe Asp Asp Glu Asp Glu Ser Asp Asp
 1140 1145 1150
 Asp Glu Glu Asn Leu Thr Leu Ala Phe Gln Ser Lys Val Ala Pro Ile
 1155 1160 1165
 Ser Arg Ala Asn Phe Leu Ser Leu Thr Gly Arg Ala Lys Ser His Asp
 1170 1175 1180
 Ser Asn Leu Pro Thr Leu Arg Gln Asn Arg Glu Lys Gly Arg Gln Leu
 1185 1190 1195 1200
 Asn Pro Glu Phe Gln Gly Pro Ile Ile Phe His Asp Gly Leu Pro Glu
 1205 1210 1215
 Phe Glu Asp Val Pro Asp Gly Leu Ile Asn Ser Asn Pro Ile Gly Asn
 1220 1225 1230

Asn	Asn	Val	Asn	Gly	Asn	Ser	Ala	Phe	Asn	Ser	Gly	Tyr	Ser	Tyr	Tyr
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Asp	Asn	Val	Asn	Pro	Thr	Val	Val	Ser	Ser	Asn	Val	Ser	Thr	Ala	Thr
1250						1255						1260			
Leu	Thr	Met	Gly	Met	Ala	Pro	Ser	Glu	Ser	Val	Glu	Thr	Asn	Val	Glu
1265						1270						1280			
Ala	Pro	Ala	Gln	Glu	Asn	Ala	Val	Lys	Val	Ser	Ser	Pro	Leu	Asn	Pro
			1285						1290			1295			
His	Lys	Asn	Thr	Ser	Ser	Arg	Ser	Asp	Ile	Leu	Lys	Asp	Leu	Lys	Lys
			1300						1305			1310			
Asn	Thr	Ser	Ile	Ser	Phe	Gly	Glu	Ile	Leu	Phe	Asn	Asp	Gln	Phe	Asn
1315						1320						1325			
Asn	His	Tyr	Lys	Lys	Asp	Pro	Val	Tyr	Ser	Pro	Phe	Pro	Ser	Ala	Lys
1330						1335						1340			
His	Leu	Asp	Asn	Asp	Gln	Glu	Thr	Ile	Val	Lys	Glu	Ser	Ala	Ser	Lys
1345						1350						1360			
Phe	His	Glu	His	Arg	Pro	Thr	Tyr	Tyr	Arg	Ser	Asn	Ser	Val	Thr	Ile
			1365						1370			1375			
Gly	Leu	Leu	His	Arg	Ser	Thr	His	Arg	Glu	Asp	Asp	Asp	Asp	Val	Ser
			1380						1385			1390			
Gln	Thr	Gly	Asn	Asp	Leu	Glu	Gln	Leu	Ile	Thr	Lys	Glu	Lys	Gln	Gly
1395						1400						1405			

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<211> 855
<212> PRT
<213> Saccharomyces cerevisiae
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Ser Leu Ser Glu Ser Ile Lys Gly Leu Phe Lys Pro Ser Gly Ile Ser
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Gly Ser Asn Asn Ala Ala Ala Pro Ser Ser Arg Pro Gly Gln Asp Gln
      35              40              45

Ala His Ser His Gln Thr Ala Arg Ile Ile Thr Ser Asn Val Ser Ser
  50              55              60

Pro Ser Ile Ser Pro Val His Ser Pro Val Leu Gln Ala Ala Pro Lys
  65              70              75              80

His His Lys Leu Gly Val Pro Asn Ile Ala Lys Leu Ser Leu Ser Pro
      85              90              95

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Ser	Arg	Glu	Pro	Ser	Leu	Asn	Ser	Glu	Asn	Glu	Met	Phe	Ser	Gln	Glu	100	105	110
Ser	Phe	Ile	Ser	Glu	Lys	Asp	Glu	Asp	Glu	Ala	Asn	Leu	Leu	Glu	Arg	115	120	125
Glu	Asp	Leu	Gln	Asn	Lys	Lys	Glu	Glu	Lys	Ala	Arg	Ala	Lys	His	Val	130	135	140
Arg	Ser	Lys	Glu	Ala	Tyr	Val	Pro	His	His	Arg	Tyr	Thr	Val	Gly	Ser	145	150	155
Asp	Glu	Val	Glu	Arg	Gln	Pro	Arg	Glu	Arg	Leu	Lys	Asn	Phe	Pro	Gln	165	170	175
Asn	Ala	Gly	Ser	Ser	Asn	Pro	Ala	Asn	Ser	Asn	Ala	Asn	His	Val	Leu	180	185	190
Asp	Gln	Glu	Asn	Asn	Phe	Ser	Ile	Asp	Ala	Met	Leu	Asp	Tyr	Asp	Glu	195	200	205
Glu	Ser	Lys	Leu	Arg	Arg	Arg	Asn	Ser	Leu	Gly	Val	Arg	Asn	His	Ser	210	215	220
Asn	Arg	Thr	Arg	Ser	Arg	Lys	Asn	Ser	Leu	Ser	Thr	Pro	Arg	Ser	Pro	225	230	235
Pro	Met	Lys	Asn	Gly	Asn	Gly	Gly	Met	Asn	Ser	Asn	Ala	Thr	Asn	Asn	245	250	255
Val	Gly	Asn	Gly	Thr	Gly	Asn	Arg	Ile	Tyr	Met	Arg	Gly	Arg	Asn	His	260	265	270
Ser	Asp	Ser	Ile	Ser	Ala	Ser	Ser	Leu	Pro	Lys	Phe	Gln	Glu	Ile	Glu	275	280	285
Cys	Lys	Cys	Ile	Leu	Asp	Leu	Gly	His	Phe	Lys	Val	Phe	Glu	Asn	Gly	290	295	300
Tyr	His	Glu	His	Ser	Leu	Arg	Val	Leu	Pro	Ile	Ile	Thr	Asn	Asn	Lys	305	310	315
Asn	Val	Asp	Ser	Gly	Asp	Glu	Lys	Asp	Ala	Asp	Ala	Ser	Val	Asn	Ser	325	330	335
Gly	Asp	Asp	Gly	Asp	Asn	Asp	Ser	Glu	Ala	Asn	Met	His	Lys	Gln	Lys	340	345	350
Ser	Val	Phe	Ser	Leu	Ser	Gly	Leu	Phe	Lys	Ser	His	Lys	Asp	Gly	Asn	355	360	365
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Glu	Glu	Asn	Gly	Glu	Gln	Ile	370	375	380
Asn	Leu	Glu	Lys	Ala	Phe	Ser	Ile	Ile	Pro	Ser	Gln	Arg	Phe	Ile	Lys	385	390	395
																400		

Ser	Gln	Thr	Leu	Lys	Lys	Ser	Arg	Thr	Ser	Asn	Leu	Lys	Asn	Gly	Asn		
				405					410					415			
Asn	Asp	Glu	Leu	Met	Lys	Asn	Asp	Gly	Lys	Asn	Ile	Pro	Gln	Ile	Val		
			420					425					430				
Asn	Pro	Asn	Ala	Ala	Val	Gly	Val	Glu	Glu	Leu	Lys	Leu	Ile	Asn	Ala		
			435				440					445					
Leu	Ser	Glu	Lys	Ile	Arg	Lys	Gly	Leu	Lys	Ser	Glu	Asn	Thr	Lys	Gly		
	450					455					460						
Asn	Asn	Gly	Glu	Gly	Arg	Ser	Asn	Ser	Asn	Lys	Gln	Glu	Asp	Ser	Asp		
465					470					475					480		
Asp	Thr	Glu	Gly	Lys	Ala	Gly	Thr	Thr	Asn	Asp	Asp	Thr	Ser	His	Lys		
				485					490					495			
Pro	Cys	Ser	Gln	Lys	Tyr	Gly	Lys	Ser	Ile	Gly	Val	Val	Gly	Ala	Gly		
			500					505					510				
Ala	Tyr	Gly	Val	Val	Lys	Ile	Cys	Ala	Arg	Cys	Lys	Thr	Ala	Lys	Asp		
	515						520					525					
Val	Leu	Pro	Tyr	Ser	Thr	Tyr	Ser	Asn	Gly	Lys	Lys	Leu	Phe	Phe	Ala		
	530					535					540						
Val	Lys	Glu	Leu	Lys	Pro	Lys	Pro	Gly	Asp	Gln	Ile	Asp	Lys	Phe	Cys		
545					550					555					560		
Thr	Arg	Leu	Thr	Ser	Glu	Phe	Ile	Ile	Gly	His	Ser	Leu	Ser	His	Pro		
				565					570					575			
His	Phe	Glu	Ala	Asn	Ala	Met	Ile	Ala	Gly	Asn	Val	Ser	Arg	Thr	Thr		
			580					585					590				
Pro	Pro	Lys	His	Val	Phe	Asn	Ala	Pro	Asn	Ile	Leu	Lys	Ile	Leu	Asp		
		595				600						605					
Leu	Met	Glu	Tyr	Ser	Asn	Ser	Phe	Val	Glu	Val	Met	Glu	Phe	Cys	Ala		
	610					615					620						
Ser	Gly	Asp	Leu	Tyr	Ser	Leu	Leu	Thr	Arg	Asn	Asn	Ile	Ser	Asn	Glu		
625					630					635					640		
Ser	Asn	Asn	Gly	Ser	Ser	Arg	Leu	Ile	Gln	Thr	Val	Lys	Glu	Gly	Ser		
				645					650					655			
Gly	Ser	Pro	Leu	His	Pro	Leu	Glu	Ala	Asp	Cys	Phe	Met	Lys	Gln	Leu		
			660					665					670				
Leu	Asn	Gly	Val	Gln	Tyr	Met	His	Asp	His	Gly	Ile	Ala	His	Cys	Asp		
		675					680					685					
Leu	Lys	Pro	Glu	Asn	Ile	Leu	Phe	Gln	Pro	Asn	Gly	Leu	Leu	Lys	Ile		
	690					695					700						

Cys Asp Phe Gly Thr Ser Ser Val Phe Gln Thr Ala Trp Glu Lys His
 705 710 715 720
 Val His Phe Gln Ser Gly Ala Met Gly Ser Glu Pro Tyr Val Ala Pro
 725 730 735
 Glu Glu Phe Ile Arg Asp Ala Glu Tyr Asp Pro Arg Leu Val Asp Cys
 740 745 750
 Trp Ser Cys Gly Ile Val Tyr Cys Thr Met Val Met Gly Gln Tyr Leu
 755 760 765
 Trp Lys Ile Ala Ile Pro Glu Lys Asp Ser Leu Phe Lys Ser Phe Leu
 770 775 780
 Ser Glu Ile Lys Asp Asp Gly Gln Phe Tyr Leu Phe Glu Glu Leu Arg
 785 790 795 800
 His Val Ser Ser Glu Leu Asn Arg Leu Arg Lys Ile Ala Leu Tyr Arg
 805 810 815
 Thr Phe Gln Val Asp Pro Thr Lys Arg Ile Thr Ile Glu Gln Leu Leu
 820 825 830
 Gln Ser Ser Trp Met Arg Lys Thr Lys Cys Cys Val Val Tyr Arg His
 835 840 845
 Leu His Thr Lys Val Ser Lys
 850 855

<210> 31
 <211> 734
 <212> PRT
 <213> *Saccharomyces cerevisiae*

<400> 31
 Met Met Asp Ser Lys Thr Leu Thr Ala Ser Met Val Met Gln Glu Glu
 1 5 10 15
 Lys Lys Arg Gln Gln Pro Val Thr Arg Arg Val Arg Ser Phe Ser Glu
 20 25 30
 Ser Phe Lys Asn Leu Phe Arg Pro Pro Arg Ser Arg Asp Ser Ser Pro
 35 40 45
 Ile Asn Val Thr Arg Ile Pro Tyr Arg Ser Ser Ser Thr Ser Pro Lys
 50 55 60
 Arg Ser Ser Glu Pro Pro Arg Arg Ser Thr Val Ser Ala Gln Ile Leu
 65 70 75 80
 Asp Pro Lys Asn Ser Pro Ile Arg Gln Arg Ser Tyr Thr Leu Lys Cys
 85 90 95
 Cys Thr Pro Gly Leu Ser His Pro Phe Arg Gln Thr Gly Ser Gly Ala
 100 105 110

Ser	Asn	Ser	Pro	Thr	Arg	His	Arg	Ser	Ile	Ser	Gly	Glu	Glu	Gln	Glu		
		115					120					125					
Ile	Val	Asn	Ser	Leu	Pro	Glu	Tyr	Lys	Arg	Ser	Ala	Ser	His	Thr	Phe		
	130					135					140						
His	Gly	Ile	Arg	Arg	Pro	Arg	Ser	Arg	Ser	Ser	Ser	Val	Ser	Ser	Cys		
145					150					155					160		
Asp	Ser	Ser	Asn	Gly	Thr	Thr	Ser	Ser	Ser	Asp	Ser	Gln	Trp	Ala	Met		
				165					170					175			
Asp	Ser	Leu	Leu	Asp	Asp	Ser	Asp	Asn	Asp	Leu	Thr	Pro	Tyr	Arg	Gly		
		180						185					190				
Ser	Asn	Lys	Asp	Ile	Leu	Lys	Ser	Lys	Asp	Arg	Ala	Pro	Tyr	Asn	Tyr		
		195					200					205					
Ile	Asp	Asp	Tyr	Asn	Lys	Lys	Ala	Leu	Arg	Arg	Ala	Thr	Ser	Tyr	Pro		
	210					215					220						
Asn	Pro	Leu	Pro	Ser	Lys	Gln	Phe	Tyr	Asn	Glu	Arg	Leu	Tyr	Thr	Arg		
225					230					235					240		
Arg	Ser	His	Pro	Asp	Glu	Glu	Ser	Leu	Glu	Ser	Leu	Pro	Arg	Phe	Ala		
				245					250					255			
Gly	Ala	Asp	Val	Gln	Cys	Ile	Ile	Glu	Gln	Asn	Gly	Phe	Lys	Val	Tyr		
			260					265					270				
Glu	Asp	Gly	Ser	His	Glu	His	Asn	Ile	Lys	Leu	Ser	Gly	Val	Ile	Ala		
		275					280					285					
Lys	Leu	Glu	Lys	Gly	Asn	Ser	Leu	Pro	Ala	His	Arg	Gln	Gly	Ser	Leu		
	290					295					300						
Ser	Arg	Pro	Arg	Leu	Gly	Ile	Thr	Leu	Ser	Gly	Leu	Phe	Lys	His	His		
305					310					315					320		
Lys	Asn	Glu	Cys	Asp	Ile	Glu	Asn	Ala	Leu	Ser	Leu	Leu	Pro	Asn	Val		
				325					330					335			
Glu	Lys	Ser	Gln	Thr	Asn	His	Glu	Lys	Arg	Thr	Gly	Gln	Ser	Pro	Asn		
			340					345					350				
Asp	Ser	Asn	Arg	Ser	Ser	Pro	Thr	Gln	Gly	Arg	Glu	Asp	Tyr	Leu	Lys		
		355					360					365					
Ile	Val	Asn	Pro	Asp	Ala	Ser	Leu	Gly	Ser	Asp	Glu	Leu	Lys	Leu	Ile		
	370					375					380						
Asn	Ser	Leu	Ser	Ser	Arg	Ile	His	Lys	Ser	Leu	Gln	Asn	Tyr	Leu	Gln		
385					390					395					400		
Glu	Lys	Asn	Leu	Lys	Pro	Ala	Glu	Cys	Ile	Gly	Glu	Gln	Ala	Pro	Thr		
				405					410					415			

Phe	Gln	Asp	Asn	Tyr	Gly	His	Pro	Val	Gly	Leu	Val	Gly	Ala	Gly	Ala		
			420					425					430				
Tyr	Gly	Glu	Val	Lys	Leu	Cys	Ala	Arg	Leu	Arg	Asn	Glu	Lys	Asp	Ser		
		435					440					445					
Pro	Pro	Phe	Glu	Thr	Tyr	His	Asp	Ser	Lys	Tyr	Ile	Tyr	Tyr	Ala	Val		
	450					455					460						
Lys	Glu	Leu	Lys	Pro	Lys	Pro	Asp	Ser	Asp	Leu	Glu	Lys	Phe	Cys	Thr		
465					470					475					480		
Lys	Ile	Thr	Ser	Glu	Phe	Ile	Ile	Gly	His	Ser	Leu	Ser	His	Tyr	His		
				485					490					495			
Lys	Asn	Gly	Lys	Lys	Pro	Ala	Pro	Asn	Ile	Leu	Asn	Val	Phe	Asp	Ile		
			500					505					510				
Leu	Glu	Asp	Ser	Ser	Ser	Phe	Ile	Glu	Val	Met	Glu	Phe	Cys	Pro	Ala		
		515					520					525					
Gly	Asp	Leu	Tyr	Gly	Met	Leu	Val	Gly	Lys	Ser	Lys	Leu	Lys	Gly	Arg		
	530					535					540						
Leu	His	Pro	Leu	Glu	Ala	Asp	Cys	Phe	Met	Lys	Gln	Leu	Leu	His	Gly		
545					550					555					560		
Val	Lys	Phe	Met	His	Asp	His	Gly	Ile	Ala	His	Cys	Asp	Leu	Lys	Pro		
				565					570						575		
Glu	Asn	Ile	Leu	Phe	Tyr	Pro	His	Gly	Leu	Leu	Lys	Ile	Cys	Asp	Phe		
			580					585					590				
Gly	Thr	Ser	Ser	Val	Phe	Gln	Thr	Ala	Trp	Glu	Arg	Arg	Val	His	Ala		
		595					600					605					
Gln	Lys	Gly	Ile	Ile	Gly	Ser	Glu	Pro	Tyr	Val	Ala	Pro	Glu	Glu	Phe		
	610					615					620						
Val	Asp	Gly	Glu	Tyr	Tyr	Asp	Pro	Arg	Leu	Ile	Asp	Cys	Trp	Ser	Cys		
625					630					635					640		
Gly	Val	Val	Tyr	Ile	Thr	Met	Ile	Leu	Gly	His	Tyr	Leu	Trp	Lys	Val		
				645					650					655			
Ala	Ser	Arg	Glu	Lys	Asp	Met	Ser	Tyr	Asp	Glu	Phe	Tyr	Lys	Glu	Met		
			660					665					670				
Gln	Arg	Lys	Asn	Gln	Phe	Arg	Val	Phe	Glu	Glu	Leu	Lys	His	Val	Asn		
		675					680					685					
Ser	Glu	Leu	Ala	Thr	Asn	Arg	Lys	Ile	Ala	Leu	Tyr	Arg	Ile	Phe	Gln		
	690					695					700						
Trp	Glu	Pro	Arg	Lys	Arg	Ile	Ser	Val	Gly	Lys	Leu	Leu	Asp	Met	Gln		
705					710					715					720		

Trp Met Lys Ser Thr Asn Cys Cys Leu Ile Tyr Asp Ser Thr
 725 730

<210> 32

<211> 789

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 32

Met Ser Ser Leu Thr Arg Leu Leu Gln Glu Lys Arg Lys Asn Glu Thr
 1 5 10 15

Ser Asn Ser Ser Pro Arg Thr Ser Ala Asp Thr Leu Thr Thr Thr Pro
 20 25 30

Glu Ser Gln Ser Leu Asp Leu His Ser Arg Asn Lys Ser Ser Ser His
 35 40 45

Ile Gly Ser Val Ser Asn Ser Ser Ser Ser Asp Arg Asn Arg Ala Asn
 50 55 60

Val Pro Val Pro Gly Ser Val Thr Thr Val Thr Gln Ile Tyr Ser Glu
 65 70 75 80

Glu Asp Ser Ser Ser Thr Ala Gly Ser Ser Leu Asp Asp Arg Asn Gln
 85 90 95

Phe Ser Ser Ser Phe Leu Asn Ala Asn Phe Ala His Thr Ala Ser Phe
 100 105 110

Tyr Gly Thr Ser Ala Gln Ser Arg Asp Arg Phe Gly Ser Leu Ile Asn
 115 120 125

Asp Gln Gly Thr Ala Gly Leu Ser Ser His Gly Gly Ser Phe Ala Ala
 130 135 140

Gln Asn Arg Ile Thr Ser Arg Leu Ser Thr Thr Ser His Thr Ser Gly
 145 150 155 160

Arg Ala Ile Pro Ser Leu Ser Ser Ser Ile Pro Tyr Ser Val Pro Asn
 165 170 175

Ser Asn Lys Asp Asn Asn Ser Ser Asn Ser Asn Ser Ser Ser Leu Ser
 180 185 190

Ser Ser Trp Leu Glu Thr Tyr Ala Gly Gly Met Pro Asn Asn Ile Thr
 195 200 205

His Glu Ser Asn Val Ile Ser Ser Pro Lys Val Asp Ser Val Glu Pro
 210 215 220

Arg Phe Val Ile Ser Lys Gln Lys Leu Gln Lys Ala Ser Met Asp Ser
 225 230 235 240

Asn Asn Ala Asn Ala Thr Gln Ser Arg Ser Ile Ser Arg Ser Gly Ser
 245 250 255

Phe	Ser	Ser	Gln	Leu	Gly	Asn	Phe	Phe	Phe	Ser	Lys	Asn	Ser	Lys	Glu
			260					265					270		
Ser	Ser	Asn	Ser	Asn	Ser	Ala	Gly	Met	Ser	Phe	Ser	Ala	Asn	Ser	Asn
		275					280					285			
Gly	Pro	Ser	Pro	Asn	Ile	Lys	Asn	Pro	Asn	Val	Thr	Asn	Gly	Ser	Thr
	290					295					300				
Pro	Ile	Pro	Lys	Pro	Ile	Arg	Ala	Arg	Gln	Ser	Ser	Ile	Tyr	Ser	Ala
305					310					315					320
Ser	Arg	Gln	Pro	Thr	Gly	Ser	Tyr	Thr	Asp	Asn	Phe	Tyr	Gly	Ser	Pro
				325					330					335	
Ser	Ser	Val	His	Asp	His	Leu	Pro	Pro	Ser	Gln	Ser	Val	Pro	Arg	Ser
			340					345					350		
Gln	His	Ser	Ser	Ile	Gly	Asp	Leu	Lys	Arg	Phe	Phe	Lys	Lys	Ser	Ser
		355					360					365			
Asn	Ser	Asn	Leu	Ser	Ser	Asn	Ser	Asn	Asn	Val	Ile	Pro	Asn	Gly	Ser
		370				375					380				
Pro	Leu	Ser	Ser	Gly	Ile	Ala	Val	Pro	Ser	His	Ser	His	Ser	Ser	Ser
385					390					395					400
His	Phe	Ala	Ala	Gly	Asn	Asn	Ser	Tyr	Ser	Thr	Ser	Tyr	Asn	Gly	Asn
				405					410					415	
Gly	Asp	Thr	Ile	Tyr	Ser	His	Ser	His	Gly	Gly	Ser	Gly	Ile	Pro	Phe
			420					425					430		
Ser	Lys	Arg	Tyr	Ile	Lys	Thr	Gly	Ala	Asp	Leu	Gly	Ala	Gly	Ala	Gly
		435					440					445			
Gly	Ser	Val	Lys	Leu	Ala	Gln	Arg	Ile	Ser	Asp	Asn	Lys	Ile	Phe	Ala
	450					455					460				
Val	Lys	Glu	Phe	Arg	Thr	Lys	Phe	Glu	Asn	Glu	Ser	Lys	Arg	Asp	Tyr
465					470					475					480
Val	Lys	Lys	Ile	Thr	Ser	Glu	Tyr	Cys	Ile	Gly	Thr	Thr	Leu	Asn	His
				485					490					495	
Pro	Asn	Ile	Ile	Glu	Thr	Ile	Glu	Ile	Val	Tyr	Glu	Asn	Asp	Arg	Ile
			500					505					510		
Leu	Gln	Val	Met	Glu	Tyr	Cys	Glu	Tyr	Asp	Leu	Phe	Ala	Ile	Val	Met
		515					520					525			
Ser	Asn	Lys	Met	Ser	Tyr	Glu	Glu	Ile	Cys	Cys	Cys	Phe	Lys	Gln	Ile
	530					535					540				
Leu	Thr	Gly	Val	Gln	Tyr	Leu	His	Ser	Ile	Gly	Leu	Ala	His	Arg	Asp
545					550					555					560

Leu Lys Leu Asp Asn Cys Val Ile Asn Glu Lys Gly Ile Val Lys Leu
 565 570 575
 Ile Asp Phe Gly Ala Ala Val Val Phe Ser Tyr Pro Phe Ser Lys Asn
 580 585 590
 Leu Val Glu Ala Ser Gly Ile Val Gly Ser Asp Pro Tyr Leu Ala Pro
 595 600 605
 Glu Val Cys Ile Phe Ala Lys Tyr Asp Pro Arg Pro Val Asp Ile Trp
 610 615 620
 Ser Ser Ala Ile Ile Phe Ala Cys Met Ile Leu Lys Lys Phe Pro Trp
 625 630 635 640
 Lys Ile Pro Lys Leu Arg Asp Asn Ser Phe Lys Leu Phe Cys Ser Gly
 645 650 655
 Arg Asp Cys Asp Ser Leu Ser Ser Leu Val Thr Arg Thr Pro Asp Pro
 660 665 670
 Pro Ser Tyr Asp Glu Ser His Ser Thr Glu Lys Lys Lys Pro Glu Ser
 675 680 685
 Ser Ser Asn Asn Val Ser Asp Pro Asn Asn Val Asn Ile Gly Pro Gln
 690 695 700
 Arg Leu Leu His Ser Leu Pro Glu Glu Thr Gln His Ile Val Gly Arg
 705 710 715 720
 Met Ile Asp Leu Ala Pro Ala Cys Arg Gly Asn Ile Glu Glu Ile Met
 725 730 735
 Glu Asp Pro Trp Ile Arg Ser Ile Asp Met Cys His Leu Val Glu Asp
 740 745 750
 Gly Leu Ser Phe Lys Val Val Arg Gly Glu Asp His His His Thr Gln
 755 760 765
 Val Asp Gln Ser Glu Ala His Ile Ala Gly Leu Glu Lys Lys Lys Lys
 770 775 780
 Lys Gln Asn Asn Gln
 785

<210> 33

<211> 699

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 33

Met Ser Leu Ser Arg Ile Leu Arg Tyr Asn Gln Arg Asn Asn Lys Thr
 1 5 10 15
 Thr Ala Ser Leu Thr Ala Glu His Ala Tyr Ser Asp Asn Trp Ala Tyr
 20 25 30

Ser	Val	Ser	Leu	Gly	Asp	Pro	Thr	Ser	Val	Gly	Val	Asn	Met	Ala	Ala
		35					40					45			
Lys	Thr	Gly	Glu	Ala	Leu	Asn	Lys	Ser	Tyr	Asp	Ser	Val	Phe	Ser	Ser
	50					55					60				
Leu	Pro	Val	Ala	Asp	Ser	Val	Pro	Arg	Thr	Asp	Phe	Thr	Ala	Ser	Ser
65					70					75					80
Arg	Asp	Asp	Glu	Asn	Thr	Asp	Val	Gln	Lys	Leu	Thr	Thr	Ser	Trp	Met
				85					90					95	
Glu	Lys	Ile	Asp	Thr	Lys	Met	Pro	Glu	Asn	Ile	Ser	Lys	Ile	Asp	Ser
			100					105					110		
Asn	Ile	Ile	Ser	Ser	Pro	Met	Val	Ser	Lys	Val	Glu	Ala	Arg	Phe	Ile
		115					120					125			
Val	Pro	Lys	Gly	Arg	Leu	Arg	Lys	Asn	Ser	Thr	Asp	Phe	Thr	Ser	Ser
	130					135					140				
Phe	Ser	Asn	Ser	Leu	Ser	Leu	Pro	Lys	Ser	Tyr	Gly	Lys	Leu	Ile	Phe
145					150					155					160
Phe	Thr	Ser	Lys	Lys	Asn	Ser	Ser	Ser	Thr	Lys	Lys	Asn	Leu	Ala	Asn
				165					170					175	
Asp	Ile	Ser	Asp	Asn	Lys	His	Asn	Asn	Asn	Ser	Ser	Asn	Thr	Ile	Gly
			180				185						190		
His	Asn	Ile	Pro	Val	Thr	Thr	Ala	Thr	Ala	Thr	Cys	Asp	Glu	Ile	Ala
		195					200					205			
Cys	Thr	Ser	Thr	Glu	His	Glu	Tyr	Asn	Val	Tyr	Glu	Glu	Glu	Arg	Met
	210					215					220				
Phe	Thr	Thr	Arg	Val	Tyr	Ser	Leu	Glu	Asp	Ser	Val	Ser	Ser	Leu	Ser
225					230					235					240
Thr	Asn	Pro	Leu	Asp	Asp	Thr	Tyr	Ser	Glu	Ala	Val	Gln	Val	Asn	Thr
				245					250					255	
Arg	His	Ile	Glu	Asp	Thr	Glu	Ser	Thr	Ala	His	Ile	Arg	Lys	His	Ser
			260					265					270		
Tyr	Thr	Thr	Ser	Leu	Ser	Ser	Ile	Lys	Arg	Leu	Phe	Lys	Ile	Thr	Ser
		275					280					285			
Phe	Ser	Asn	Asn	Asn	Ser	Asn	Ser	Cys	Asp	His	Gln	Glu	Ser	Thr	Val
	290					295					300				
Ala	Asp	Asp	Cys	Ala	Ile	Ser	Ser	Ser	Leu	Lys	Glu	Thr	Thr	Ser	Ser
305					310					315					320
Pro	Val	Ser	Thr	Gly	Ser	Phe	Ser	Leu	Met	Ile	Glu	Asn	Glu	Asp	Ser
				325					330					335	

Asp	Arg	Asp	Gln	Ile	Ile	Gln	Ala	Leu	Tyr	Ser	Asn	Ile	Glu	Ala	Ser	340	345	350
Thr	Asp	Leu	Val	Ser	Arg	Lys	Tyr	Arg	Asp	Leu	Asp	Val	Val	Leu	Gly	355	360	365
Glu	Gly	Ser	Gly	Gly	Lys	Val	Lys	Leu	Val	Gln	Arg	Val	Leu	Asp	Asn	370	375	380
Lys	Val	Phe	Ala	Leu	Lys	Glu	Tyr	Arg	Ser	Lys	Lys	Lys	Arg	Glu	Ser	385	390	395
Glu	Arg	Lys	Tyr	Ile	Lys	Asn	Ile	Ile	Ser	Glu	Tyr	Cys	Ile	Ala	Ser	405	410	415
Thr	Leu	Lys	Asn	Pro	Asn	Ile	Cys	Glu	Thr	Leu	Glu	Ile	Leu	Tyr	Glu	420	425	430
Lys	Gly	Lys	Ile	Phe	Gln	Ile	Leu	Glu	Tyr	Cys	Glu	Tyr	Asp	Leu	Phe	435	440	445
Ser	Leu	Val	Met	Ser	Glu	Lys	Met	His	Tyr	Glu	Glu	Ile	Cys	Cys	Leu	450	455	460
Phe	Lys	Gln	Leu	Ile	Asn	Gly	Val	Lys	Tyr	Leu	His	Asp	Ile	Gly	Leu	465	470	475
Ser	His	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Cys	Val	Val	Thr	Arg	Arg	Gly	485	490	495
Ile	Leu	Lys	Leu	Ile	Asp	Phe	Gly	Ala	Ser	Ser	Val	Phe	His	Tyr	Pro	500	505	510
Leu	Ser	Ser	Gln	Met	Ile	Glu	Ala	Asn	Gly	Ile	Val	Gly	Ser	Asp	Pro	515	520	525
Tyr	Leu	Ser	Pro	Glu	Val	Phe	Tyr	Phe	Asn	Glu	Tyr	Asp	Pro	Arg	Ala	530	535	540
Leu	Asp	Val	Trp	Ser	Val	Gly	Ile	Ile	Phe	Phe	Cys	Met	Ile	Thr	Arg	545	550	555
Arg	Phe	Pro	Trp	Lys	Tyr	Pro	Lys	Val	Lys	Asp	Val	Gln	Phe	Lys	Ala	565	570	575
Phe	Cys	Ser	Gly	Arg	Gly	Val	Ser	Ser	Phe	Lys	Asp	Leu	Val	Thr	Arg	580	585	590
Pro	Ala	Thr	Asp	Asp	Ser	Asn	Asn	Tyr	Asp	Asn	Asp	Gly	Tyr	Glu	Glu	595	600	605
Gly	Val	Ile	Asp	Met	Gly	Pro	Asn	Phe	Ile	Leu	His	Arg	Leu	Pro	Glu	610	615	620
Glu	Thr	His	Lys	Ile	Met	Arg	Arg	Ile	Leu	Glu	Val	Ser	Pro	Phe	Arg	625	630	635
																		640

Arg Ile Thr Ile Asn Gly Ile Leu Gln Asp Gly Trp Ile Lys Glu Ile
645 650 655

Glu Thr Cys Gln Val Val Gly Ala Ala Ser Pro Asn Glu Ala Ser Leu
660 665 670

Arg Ile Ile Asn Lys Gly Asn His Ile His Thr Asn Ile Asp Gln Arg
675 680 685

Tyr Ala His Ile Gly Gly Leu His Gln Arg Thr
690 695

<210> 34
<211> 560
<212> PRT
<213> *Saccharomyces cerevisiae*

<400> 34
Met Thr Val Ser His Asn His Ser Thr Lys Ile Ser Gln Gln Pro Ile
1 5 10 15

Ser Ser Val Ser Ala Phe Lys Phe Phe Gly Lys Lys Leu Leu Ser Ser
20 25 30

Ser His Gly Asn Lys Leu Lys Lys Lys Ala Ser Leu Pro Pro Asp Phe
35 40 45

His Ser Thr Ser Thr Asn Asp Ser Glu Ser Ser Ser Pro Lys Leu Pro
50 55 60

Asn Ser Leu Lys Thr Ser Arg Arg Ala Asn Ser Phe Ala His Thr Thr
65 70 75 80

Asn Ser Lys Arg Ser Leu Ser Ser Ala Ser Thr Lys Ile Leu Pro Pro
85 90 95

Ala Gly Ser Ser Thr Ser Ile Ser Arg Gly Asn Arg His Ser Ser Thr
100 105 110

Ser Arg Asn Leu Ser Asn Ser Lys Phe Ser Ser Glu Arg Leu Val Tyr
115 120 125

Asn Pro Tyr Gly Val Ser Thr Pro Ser Thr Ser Leu Ser Ser Val Ser
130 135 140

Thr Ser Met Lys Lys Asp Pro Asp Leu Gly Phe Tyr Leu His Asp Gly
145 150 155 160

Asp Ser Lys Ile Arg Met Leu Pro Ile Pro Ile Val Asp Pro Asn Glu
165 170 175

Tyr Leu Pro Asp Glu Met Lys Glu Ala Ser Ile Gln Leu Ser Asp Asn
180 185 190

Phe Val Phe Asp Asp Glu Asn Lys Thr Ile Gly Trp Gly Gly Ser Cys
195 200 205

Glu	Val	Arg	Lys	Ile	Arg	Ser	Lys	Tyr	Arg	Lys	Lys	Asp	Val	Phe	Ala			
210						215					220							
Leu	Lys	Lys	Leu	Asn	Met	Ile	Tyr	Asn	Glu	Thr	Pro	Glu	Lys	Phe	Tyr			
225					230					235					240			
Asn	Ala	Ala	Pro	Lys	Glu	Phe	Ile	Ile	Ala	Lys	Gln	Leu	Ser	His	His			
				245					250					255				
Val	His	Ile	Thr	Asn	Thr	Phe	Leu	Leu	Val	Lys	Val	Pro	Thr	Thr	Val			
			260					265						270				
Tyr	Thr	Thr	Arg	Gly	Trp	Gly	Phe	Val	Met	Glu	Leu	Gly	Leu	Arg	Asp			
		275					280					285						
Leu	Phe	Ala	Met	Ile	Gln	Lys	Ser	Gly	Trp	Arg	His	Val	Ala	Leu	Ala			
290						295					300							
Glu	Lys	Phe	Cys	Ile	Phe	Lys	Gln	Val	Ala	Cys	Gly	Val	Lys	Phe	Cys			
305					310					315					320			
His	Asp	Gln	Gly	Ile	Ala	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Val	Leu			
				325					330					335				
Leu	Ser	Pro	Asp	Gly	Val	Cys	Lys	Leu	Thr	Asp	Phe	Gly	Ile	Ser	Asp			
			340					345					350					
Trp	Tyr	His	His	Gly	Ser	Thr	Arg	Pro	Val	Gln	Pro	Cys	Gln	Glu	Val			
		355					360					365						
Arg	Arg	Asp	Asp	Arg	Leu	Ala	Pro	Tyr	Ala	Pro	Pro	Glu	Val	Met	Phe			
	370					375					380							
Tyr	Asp	Ser	Lys	Lys	His	Tyr	Asp	Thr	Glu	Leu	Gln	Gln	Pro	Tyr	Asp			
385					390					395					400			
Pro	Arg	Ala	Leu	Asp	Cys	Tyr	Gly	Leu	Gly	Ile	Ile	Leu	Met	Thr	Leu			
				405					410					415				
Val	Asn	Asn	Val	Ile	Pro	Phe	Leu	Glu	Ser	Cys	Ser	Phe	Asp	Thr	Gly			
			420					425					430					
Phe	Arg	Asp	Tyr	Cys	Asp	Ala	Tyr	Glu	Asn	Phe	Ile	Arg	Leu	His	Asp			
		435					440					445						
Arg	Ala	Phe	Arg	Asn	Arg	Ala	Ile	Thr	Ala	Arg	Gly	Arg	Glu	Trp	Ser			
	450					455					460							
Ile	Thr	Trp	Leu	Glu	Ile	Ser	Arg	Thr	Asp	Met	His	Leu	Ala	Trp	His			
465					470					475					480			
Gly	Gly	Ser	Leu	Thr	Gln	Lys	Pro	Pro	Pro	Ala	Thr	Pro	Ser	Thr	Thr			
				485					490					495				
Ser	Ser	Lys	Thr	His	Gly	Ser	Lys	Glu	Leu	Arg	Leu	Val	Leu	Met	Pro			
			500					505					510					

Thr Thr Asn Met Cys Val Arg Asn Leu Leu Ser Lys Pro Leu Arg Thr
 515 520 525

Arg Ile Arg Gly Val Ser Ile Ser Leu Gln Met Leu Leu Gln Pro His
 530 535 540

Pro Pro Gln Thr His Ser Leu Arg Thr Glu Ser Pro Ser Gly Gln Trp
 545 550 555 560

<210> 35

<211> 818

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 35

Met Ala Gly Asn Gly Lys Asp Lys Glu Val Asp Lys Ser Pro Ser Val
 1 5 10 15

Ser Thr Leu Lys Leu Leu Gly Lys Arg Leu Phe Asn Ser Ser Ser His
 20 25 30

Thr Asp Asn Ser Ser Leu Leu Leu Ser Ala Glu Gln Leu Gly Asn Gly
 35 40 45

Arg Ser Leu Arg Lys Arg Pro Thr Ser Pro Ser Ile Ser Gly Ser Gly
 50 55 60

Ser Gly Gly Asn Ser Pro Ser Ser Ser Ala Gly Ala Arg Gln Arg Ser
 65 70 75 80

Ala Ser Leu His Arg Arg Lys Asn Asn Ala Ser Val Gly Phe Ser Asn
 85 90 95

Gly Ser Val Ser Ser His Lys Ser Ser Val Ala Leu Gln Asp Leu Ile
 100 105 110

Lys His Asn Asn Asn Pro Tyr Leu Asn Ser Pro Ser Asp Ile Leu Gly
 115 120 125

Thr Gly Thr Gly Ile Ala Ser Thr Arg Asp Arg Asp Arg Ala Val Leu
 130 135 140

Asp Arg Glu Lys Glu Lys Glu Arg Ala Arg Asn Lys Glu Arg Asn Thr
 145 150 155 160

His His Ala Gly Leu Pro Gln Arg Ser Asn Ser Met Ala Ser His His
 165 170 175

Phe Pro Asn Glu Asn Ile Val Tyr Asn Pro Tyr Gly Ile Ser Pro Asn
 180 185 190

His Ala Arg Pro Asp Thr Ala Phe Ala Asp Thr Leu Asn Thr Asn Lys
 195 200 205

Glu Asn Asp Leu Ser Phe Tyr Met His Asp Gly Asn Ser Lys Ile Arg
 210 215 220

Met	Leu	Pro	Leu	Pro	Ile	Ala	Asn	Pro	Asn	Asp	Phe	Leu	Pro	Glu	Asp	225	230	235	240
Met	Lys	Gln	Tyr	Ser	Val	His	Leu	Thr	Asp	Asn	Phe	Val	Phe	Asp	Thr	245	250	255	
Asp	Asn	Lys	Pro	Ile	Gly	Ser	Gly	Gly	Ser	Ser	Glu	Val	Arg	Lys	Val	260	265	270	
Lys	Ser	Ser	Tyr	Arg	Gln	Lys	Asp	Val	Tyr	Ala	Leu	Lys	Lys	Leu	Asn	275	280	285	
Met	Ile	Tyr	His	Glu	Ser	Pro	Glu	Lys	Phe	Tyr	Lys	Arg	Cys	Ser	Lys	290	295	300	
Glu	Phe	Ile	Ile	Ala	Lys	His	Leu	Ser	His	Asn	Val	His	Ile	Thr	Asn	305	310	315	320
Thr	Phe	Tyr	Leu	Leu	Lys	Val	Pro	Thr	Thr	Thr	Tyr	Thr	Thr	Arg	Gly	325	330	335	
Trp	Gly	Phe	Ile	Met	Glu	Leu	Gly	Val	Lys	Asp	Leu	Phe	Gln	Leu	Met	340	345	350	
Glu	Arg	Thr	Gly	Trp	Lys	Asn	Val	Pro	Phe	Asn	Glu	Lys	Tyr	Cys	Leu	355	360	365	
Phe	Lys	Gln	Val	Ala	Gln	Gly	Ile	Lys	Phe	Cys	His	Asp	Asn	Gly	Ile	370	375	380	
Ala	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Val	Leu	Ile	Ser	Lys	Glu	Gly	385	390	395	400
Ile	Cys	Lys	Leu	Thr	Asp	Phe	Gly	Ile	Ser	Asp	Trp	Tyr	His	Val	Ile	405	410	415	
Pro	His	Asp	Tyr	Thr	Ser	Pro	Val	Lys	Thr	Cys	Gln	Gly	Met	Ile	Gly	420	425	430	
Ser	Pro	Pro	Tyr	Thr	Pro	Pro	Glu	Val	Met	Tyr	Phe	Asp	Ala	Lys	Lys	435	440	445	
His	Tyr	Pro	Glu	Lys	Phe	Gln	Lys	Pro	Tyr	Asn	Pro	Leu	Ala	Met	Asp	450	455	460	
Ser	Tyr	Ala	Leu	Gly	Ile	Met	Leu	Ile	Thr	Met	Ile	Asn	Asn	Ile	Ile	465	470	475	480
Pro	Phe	Ile	Asp	Ser	Cys	Asn	Thr	Asp	Ala	Arg	Phe	Arg	Glu	Phe	Glu	485	490	495	
Val	Ser	Tyr	Asp	Asn	Phe	Ile	Asn	His	Gln	Asn	Pro	His	Phe	Arg	Asp	500	505	510	
Lys	Gly	Cys	His	Lys	Pro	Gly	Pro	Gly	Ser	Glu	Tyr	Ser	Leu	Ala	Arg	515	520	525	

<210> 36

<211> 603

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 36

Met	Thr	Gly	Met	Asn	Asp	Asn	Asn	Ala	Ala	Ile	Pro	Gln	Gln	Thr	Pro
1				5					10					15	
Arg	Lys	His	Ala	Leu	Ser	Ser	Lys	Val	Met	Gln	Leu	Phe	Arg	Ser	Gly
			20					25					30		
Ser	Arg	Ser	Ser	Arg	Gln	Gly	Lys	Ala	Ser	Ser	Asn	Ile	Gln	Pro	Pro
	35						40					45			
Ser	Asn	Ile	Asn	Thr	Asn	Val	Pro	Ser	Ala	Ser	Lys	Ser	Ala	Lys	Phe
	50					55					60				
Gly	Leu	His	Thr	Pro	Thr	Thr	Ala	Thr	Pro	Arg	Val	Val	Ser	Asn	Pro
	65					70				75					80
Ser	Asn	Thr	Ala	Gly	Val	Ser	Lys	Pro	Gly	Met	Tyr	Met	Pro	Glu	Tyr
				85					90					95	
Tyr	Gln	Ser	Ala	Ser	Pro	Ser	His	Ser	Ser	Ser	Ser	Ala	Ser	Leu	Asn
			100					105					110		
Asn	His	Ile	Asp	Ile	Asn	Thr	Ser	Lys	Ser	Ser	Ser	Ala	Ala	Ser	Leu
		115					120					125			
Thr	Ser	Ser	Val	Ser	Ala	Leu	Ser	Leu	Ser	Pro	Thr	Ser	Ala	Ile	Asn
	130					135					140				
Ile	Ser	Ser	Lys	Ser	Leu	Ser	Pro	Lys	Phe	Ser	His	His	Ser	Asn	Ser
	145				150					155					160
Asn	Thr	Ala	Ile	Thr	Pro	Ala	Pro	Thr	Pro	Thr	Ala	Ser	Asn	Ile	Asn
				165					170					175	
Asn	Val	Asn	Lys	Ile	Thr	Asn	Thr	Ser	Ala	Pro	Ile	Cys	Gly	Arg	Phe
			180					185					190		
Leu	Val	His	Lys	Asp	Gly	Thr	His	Glu	His	His	Leu	Lys	Asn	Ala	Lys
		195					200					205			
Arg	Gln	Glu	Lys	Leu	Ser	Thr	Met	Ile	Lys	Asn	Met	Val	Gly	Ala	Ser
	210					215					220				
Lys	Leu	Arg	Gly	Glu	Ala	Lys	Ser	Ala	Val	Pro	Asp	Ile	Ile	Met	Asp
	225				230					235					240
Pro	Lys	Thr	Thr	Leu	Lys	Ser	Asn	Lys	Asn	Pro	Pro	Thr	Leu	Phe	Ala
				245					250					255	
Gly	Phe	Met	Lys	Gln	Val	Val	Asp	Met	Asp	Asp	Lys	Tyr	Pro	Glu	Gly
			260					265					270		

Ala	Pro	Thr	Ser	Gly	Ala	Leu	Asn	Cys	Pro	Glu	Arg	Asp	Ile	Tyr	Arg
	275						280					285			
Ser	Asp	Gln	Lys	Asp	Ser	Lys	Asn	Asn	Thr	His	Asn	Ile	Thr	Thr	Thr
	290					295					300				
Lys	Lys	Asp	Arg	Gln	Cys	Phe	Ala	Glu	Lys	Tyr	Gly	Arg	Cys	Gln	Glu
305					310					315					320
Val	Leu	Gly	Lys	Gly	Ala	Phe	Gly	Val	Val	Arg	Ile	Cys	Gln	Lys	Lys
				325					330					335	
Asn	Val	Ser	Ser	Gln	Asp	Gly	Asn	Lys	Ser	Glu	Lys	Leu	Tyr	Ala	Val
			340					345					350		
Lys	Glu	Phe	Lys	Arg	Arg	Thr	Ser	Glu	Ser	Ala	Glu	Lys	Tyr	Ser	Lys
		355					360					365			
Arg	Leu	Thr	Ser	Glu	Phe	Cys	Ile	Ser	Ser	Ser	Leu	His	His	Thr	Asn
	370					375					380				
Ile	Val	Thr	Thr	Leu	Asp	Leu	Phe	Gln	Asp	Ala	Lys	Gly	Glu	Tyr	Cys
385					390					395					400
Glu	Val	Met	Glu	Tyr	Cys	Ala	Gly	Gly	Asp	Leu	Phe	Thr	Leu	Val	Val
				405					410					415	
Ala	Ala	Gly	Lys	Leu	Glu	Tyr	Met	Glu	Ala	Asp	Cys	Phe	Phe	Lys	Gln
			420					425					430		
Leu	Ile	Arg	Gly	Val	Val	Tyr	Met	His	Glu	Met	Gly	Val	Cys	His	Arg
		435					440					445			
Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	Leu	Thr	His	Asp	Gly	Val	Leu	Lys
	450					455					460				
Ile	Thr	Asp	Phe	Gly	Asn	Ser	Glu	Cys	Phe	Lys	Met	Ala	Trp	Glu	Lys
465					470					475					480
Asn	Ile	His	Leu	Ser	Gly	Gly	Val	Cys	Gly	Ser	Ser	Pro	Tyr	Ile	Ala
			485						490					495	
Pro	Glu	Glu	Tyr	Ile	Lys	Glu	Glu	Phe	Asp	Pro	Arg	Pro	Val	Asp	Ile
			500					505					510		
Trp	Ala	Cys	Gly	Val	Ile	Tyr	Met	Ala	Met	Arg	Thr	Gly	Arg	Gln	Leu
		515					520					525			
Trp	Ser	Ser	Ala	Glu	Lys	Asp	Asp	Pro	Phe	Tyr	Met	Asn	Tyr	Leu	Lys
	530					535					540				
Gly	Arg	Lys	Glu	Lys	Gly	Gly	Tyr	Glu	Pro	Ile	Glu	Ser	Leu	Lys	Arg
545					550					555					560
Ala	Arg	Cys	Arg	Asn	Val	Ile	Tyr	Ser	Met	Leu	Asp	Pro	Val	Pro	Tyr
				565					570					575	

Arg Arg Ile Asn Gly Lys Gln Ile Leu Asn Ser Glu Trp Gly Arg Glu
 580 585 590

Ile Lys Cys Cys His Asn Gly Arg Ala Leu Lys
 595 600

<210> 37

<211> 620

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 37

Met Val Lys Glu Thr Pro Leu His Ser Ser Ser Ser Thr Ser Leu Ser
 1 5 10 15

Ser Leu Phe Arg Pro Thr Lys Leu Lys Asn Leu Ser Ala Lys Ile Phe
 20 25 30

Asn Gly Gly Gly Asn Gln Ser Tyr Ser Lys Thr Asp Asp Val Ser Arg
 35 40 45

Ser Ser Ser Arg Ser Ser Lys Lys Asn Thr Asp Ser Asp Gln Glu Asp
 50 55 60

Gln Ile Lys Tyr Asn Lys Pro Asn Asp Arg Arg Ser Thr Ile Gly Lys
 65 70 75 80

Ser Pro Gln Gly Asn Gly Ala Leu Ser Lys Glu Ser His Val Val Ala
 85 90 95

Ser Ser Thr Leu Thr Gly Ile Ser Pro Thr Ser Ala Lys Lys Ala Pro
 100 105 110

Ile Asp Tyr Ser Pro Ser Arg Pro Leu Pro Asn Asn His Asn Pro Val
 115 120 125

Arg Thr Gly His Thr Val Pro His Leu Pro His Ser Ile His Asn Pro
 130 135 140

Ile Asn Tyr Ile His Gln Gly Ser Lys Asp Ala Phe His His Pro His
 145 150 155 160

Pro Val Arg Ser Thr Ala His Ser Asn Ile Ser Thr Val Ser Ser Ala
 165 170 175

Lys Ser Asp Thr Pro Ser Ser Asn Leu Ser Tyr Gln Ala His Met His
 180 185 190

Pro Val Glu Ile Leu Gln Lys Gln Ile Glu Asp Lys His Phe Met Asp
 195 200 205

Ser Gln Ala Ser Thr Pro Gly Ser Val Glu Leu Gln His Asn Ser Ser
 210 215 220

Ser Gly Ser Asp Asp Thr Ser Ser Arg Lys Lys Lys Ser Leu Arg Leu
 225 230 235 240

Thr	Arg	Phe	Phe	Lys	Lys	Ile	His	Asn	Asp	Tyr	His	Asp	Asn	His	His	
				245					250					255		
His	His	His	His	His	Asn	Arg	Gly	Ser	Thr	Pro	Thr	Lys	Pro	Lys	Leu	
			260					265					270			
Asn	Leu	Asn	Thr	Asn	Glu	Asn	Ile	Val	Glu	Ser	Asn	Gly	Lys	Ala	Leu	
		275					280					285				
Tyr	Glu	Thr	Asp	Asn	Pro	Val	Glu	Leu	Leu	Glu	Lys	Tyr	Gly	Ile	Pro	
	290					295					300					
Gly	Arg	Lys	Leu	Gly	Glu	Gly	Ala	Ser	Gly	Ser	Val	Ser	Val	Val	Glu	
305					310					315					320	
Arg	Thr	Asp	Gly	Lys	Leu	Phe	Ala	Cys	Lys	Met	Phe	Arg	Lys	Pro	His	
				325					330					335		
Leu	Asn	Asn	Glu	Gly	Thr	Asn	Gln	Ser	Gln	Leu	Ala	Asn	Tyr	Ser	Lys	
			340					345					350			
Lys	Val	Thr	Thr	Glu	Phe	Cys	Ile	Gly	Ser	Thr	Leu	His	His	Glu	Asn	
		355					360					365				
Ile	Val	Glu	Thr	Leu	Asp	Met	Leu	Thr	Glu	Gly	Asp	Thr	Tyr	Leu	Leu	
	370					375					380					
Val	Met	Glu	Tyr	Ala	Pro	Tyr	Asp	Phe	Phe	Asn	Leu	Val	Met	Ser	Asn	
385					390					395					400	
Leu	Met	Thr	Gln	Asp	Glu	Val	Asn	Cys	Tyr	Phe	Lys	Gln	Leu	Cys	His	
				405					410					415		
Gly	Val	Asn	Tyr	Leu	His	Ser	Met	Gly	Leu	Ala	His	Arg	Asp	Leu	Lys	
			420					425					430			
Leu	Asp	Asn	Cys	Val	Val	Thr	Lys	Asp	Gly	Ile	Leu	Lys	Leu	Ile	Asp	
		435					440					445				
Phe	Gly	Ser	Ala	Val	Val	Phe	Gln	Tyr	Pro	Tyr	Glu	Asp	Thr	Ile	Val	
	450					455					460					
Lys	Ser	His	Gly	Ile	Val	Gly	Ser	Asp	Pro	Tyr	Leu	Ala	Pro	Glu	Leu	
465					470				475						480	
Leu	Lys	Gln	Thr	Ser	Tyr	Asp	Pro	Arg	Val	Ala	Asp	Val	Trp	Ser	Ile	
				485					490					495		
Ala	Ile	Ile	Phe	Tyr	Cys	Met	Val	Leu	Lys	Arg	Phe	Pro	Trp	Lys	Ala	
			500					505					510			
Pro	Lys	Lys	Ser	Phe	Asn	Ser	Phe	Arg	Leu	Phe	Thr	Glu	Glu	Pro	Glu	
		515					520					525				
Asp	Glu	Asp	Asp	Ile	Val	Arg	Gly	Pro	Asn	Lys	Ile	Leu	Arg	Leu	Leu	
	530					535					540					

Pro Arg His Ser Arg Thr Ile Ile Gly Arg Met Leu Ala Leu Glu Pro
 545 550 555 560

Lys Gln Arg Val Leu Met Asn Asp Val Val Lys Asp Asp Trp Leu Val
 565 570 575

Ser Val Pro Ser Cys Glu Val Asp Pro Thr Ser Gly Asp Leu Val Glu
 580 585 590

Lys Pro Lys Asn His Lys His His Leu Val Thr Glu Glu Glu Leu Asn
 595 600 605

Glu Leu Thr Lys Gln His Gly Asn Lys Asp Ser Asn
 610 615 620

<210> 38

<211> 759

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 38

Met Pro Asn Leu Leu Ser Arg Asn Pro Phe His Gly His His Asn Asp
 1 5 10 15

His His His Asp Arg Glu Asn Ser Ser Asn Asn Pro Pro Gln Leu Ile
 20 25 30

Arg Ser Ser Lys Ser Phe Leu Asn Phe Ile Gly Arg Lys Gln Ser Asn
 35 40 45

Asp Ser Leu Arg Ser Glu Lys Ser Thr Asp Ser Met Lys Ser Thr Thr
 50 55 60

Thr Thr Thr Asn Tyr Thr Thr Thr Asn Leu Asn Asn Asn Thr His Ser
 65 70 75 80

His Ser Asn Ala Thr Ser Ile Ser Thr Asn Asn Tyr Asn Asn Asn Tyr
 85 90 95

Glu Thr Asn His His His Asn Ile Ser His Gly Leu His Asp Tyr Thr
 100 105 110

Ser Pro Ala Ser Pro Lys Gln Thr His Ser Met Ala Glu Leu Lys Arg
 115 120 125

Phe Phe Arg Pro Ser Val Asn Lys Lys Leu Ser Met Ser Gln Leu Arg
 130 135 140

Ser Lys Lys His Ser Thr His Ser Pro Pro Pro Ser Lys Ser Thr Ser
 145 150 155 160

Thr Val Asn Leu Asn Asn His Tyr Arg Ala Gln His Pro His Gly Phe
 165 170 175

Thr Asp His Tyr Ala His Thr Gln Ser Ala Ile Pro Pro Ser Thr Asp
 180 185 190

Ser	Ile	Leu	Ser	Leu	Ser	Asn	Asn	Ile	Asn	Ile	Tyr	His	Asp	Asp	Cys
		195					200					205			
Ile	Leu	Ala	Gln	Lys	Tyr	Gly	Lys	Leu	Gly	Lys	Leu	Leu	Gly	Ser	Gly
	210					215					220				
Ala	Gly	Gly	Ser	Val	Lys	Val	Leu	Val	Arg	Pro	Thr	Asp	Gly	Ala	Thr
225					230					235					240
Phe	Ala	Val	Lys	Glu	Phe	Arg	Pro	Arg	Lys	Pro	Asn	Glu	Ser	Val	Lys
				245					250					255	
Glu	Tyr	Ala	Lys	Lys	Cys	Thr	Ala	Glu	Phe	Cys	Ile	Gly	Ser	Thr	Leu
			260					265					270		
His	His	Pro	Asn	Val	Ile	Glu	Thr	Val	Asp	Val	Phe	Ser	Asp	Ser	Lys
		275					280					285			
Gln	Asn	Lys	Tyr	Tyr	Glu	Val	Met	Glu	Tyr	Cys	Pro	Ile	Asp	Phe	Phe
	290					295					300				
Ala	Val	Val	Met	Thr	Gly	Lys	Met	Ser	Arg	Gly	Glu	Ile	Asn	Cys	Cys
305					310					315					320
Leu	Lys	Gln	Leu	Thr	Glu	Gly	Val	Lys	Tyr	Leu	His	Ser	Met	Gly	Leu
				325					330					335	
Ala	His	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Cys	Val	Met	Thr	Ser	Gln	Gly
			340					345						350	
Ile	Leu	Lys	Leu	Ile	Asp	Phe	Gly	Ser	Ala	Val	Val	Phe	Arg	Tyr	Pro
		355					360						365		
Phe	Glu	Asp	Gly	Val	Thr	Met	Ala	His	Gly	Ile	Val	Gly	Ser	Asp	Pro
	370					375					380				
Tyr	Leu	Ala	Pro	Glu	Val	Ile	Thr	Ser	Thr	Lys	Ser	Tyr	Asp	Pro	Gln
385					390					395					400
Cys	Val	Asp	Ile	Trp	Ser	Ile	Gly	Ile	Ile	Tyr	Cys	Cys	Met	Val	Leu
				405					410					415	
Lys	Arg	Phe	Pro	Trp	Lys	Ala	Pro	Arg	Asp	Ser	Asp	Asp	Asn	Phe	Arg
			420					425					430		
Leu	Tyr	Cys	Met	Pro	Asp	Asp	Ile	Glu	His	Asp	Tyr	Val	Glu	Ser	Ala
		435					440					445			
Arg	His	His	Glu	Glu	Leu	Leu	Lys	Glu	Arg	Lys	Glu	Lys	Arg	Gln	Arg
	450					455					460				
Phe	Leu	Asn	His	Ser	Asp	Cys	Ser	Ala	Ile	Asn	Gln	Gln	Gln	Pro	Ala
465					470					475					480
His	Glu	Ser	Asn	Leu	Lys	Thr	Val	Gln	Asn	Gln	Val	Pro	Asn	Thr	Pro
				485					490					495	

Ala Ser Ile Gln Gly Lys Ser Asp Asn Lys Pro Asp Ile Val Glu Glu
 500 505 510
 Glu Thr Glu Glu Asn Lys Glu Asp Asp Ser Asn Asn Asp Lys Glu Ser
 515 520 525
 Thr Pro Asp Asn Asp Lys Glu Ser Thr Ile Asp Ile Lys Ile Ser Lys
 530 535 540
 Asn Glu Asn Lys Ser Thr Val Val Ser Ala Asn Pro Lys Lys Val Asp
 545 550 555 560
 Ala Asp Ala Asp Ala Asp Cys Asp Ala Asn Gly Asp Ser Asn Gly Arg
 565 570 575
 Val Asp Cys Lys Ala Asn Ser Asp Cys Asn Asp Lys Thr Asp Cys Asn
 580 585 590
 Ala Asn Asn Asp Cys Ser Asn Glu Ser Asp Cys Asn Ala Lys Val Asp
 595 600 605
 Thr Asn Val Asn Thr Ala Ala Asn Ala Asn Pro Asp Met Val Pro Gln
 610 615 620
 Asn Asn Pro Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
 625 630 635 640
 Gln Gln Gln Gln Gln Gln Gln His His His His Gln His Gln Asn Gln
 645 650 655
 Asp Lys Ala His Ser Ile Ala Ser Asp Asn Lys Ser Ser Gln Gln His
 660 665 670
 Arg Gly Pro His His Lys Lys Ile Ile His Gly Pro Tyr Arg Leu Leu
 675 680 685
 Arg Leu Leu Pro His Ala Ser Arg Pro Ile Met Ser Arg Ile Leu Gln
 690 695 700
 Val Asp Pro Lys Lys Arg Ala Thr Leu Asp Asp Ile Phe Asn Asp Glu
 705 710 715 720
 Trp Phe Ala Ala Ile Ala Ala Cys Thr Met Asp Ser Lys Asn Lys Val
 725 730 735
 Ile Arg Ala Pro Gly His His His Thr Leu Val Arg Glu Glu Asn Ala
 740 745 750
 His Leu Glu Thr Tyr Lys Val
 755

<210> 39

<211> 636

<212> PRT

<213> Schizosaccharomyces pombe

<400> 39

Met	Gly	Glu	Lys	Asp	Lys	Leu	His	Glu	Ile	Ser	Ser	Lys	Phe	Ala	Ser	1	5	10	15
Leu	Gly	Leu	Gly	Ser	Leu	Lys	Ser	Thr	Pro	Lys	Ala	Arg	Glu	Thr	Thr	20	25	30	
Glu	Pro	Pro	Pro	Ser	Ser	Gln	Gln	Pro	Pro	Ser	Thr	Pro	Asn	Gly	35	40	45		
Lys	Glu	Ala	Ala	Ser	Pro	Ser	Ala	Leu	Lys	Gln	Asn	Val	Arg	Pro	Ser	50	55	60	
Leu	Asn	Ser	Val	Gln	Gln	Thr	Pro	Ala	Ser	Ile	Asp	Ala	Val	Ala	Ser	65	70	75	80
Ser	Ser	Asn	Val	Ser	Leu	Gln	Ser	Gln	Gln	Pro	Leu	Ser	Lys	Pro	Val	85	90	95	
Val	Ser	Ser	Lys	Pro	Asn	Gln	Thr	Thr	Ala	Met	Pro	Pro	Pro	Ser	Asn	100	105	110	
Asn	Pro	Ser	Arg	His	Val	Ser	Ser	Thr	Ser	Asn	Lys	Pro	Ala	Ala	Val	115	120	125	
Ser	Pro	Asn	Pro	Ala	Ala	His	His	Ala	Glu	Leu	Pro	Ser	Gly	Ser	Val	130	135	140	
Pro	Pro	Ser	Ala	Ser	Val	Ser	Arg	Ala	Asn	Ser	Thr	Ala	Thr	Thr	Thr	145	150	155	160
Pro	His	Lys	Ala	Gly	Val	Val	Ser	Asn	Pro	Ala	Ala	Ala	Asn	Val	His	165	170	175	
Val	Leu	Ser	Val	Ala	Ala	Ser	Pro	Asn	Pro	Ser	Thr	Pro	Ser	Asn	Gly	180	185	190	
Pro	Ala	Pro	Val	Ser	Thr	Thr	Ala	Thr	Pro	Ser	Arg	Asn	Pro	Val	Thr	195	200	205	
Arg	Leu	Gln	Arg	Ile	Phe	Ser	Gln	Asn	Ser	Val	Ser	Arg	Gln	Asn	Ser	210	215	220	
Arg	Thr	Gly	Arg	Gly	Ala	Ala	Val	Ala	Asn	Thr	Glu	Glu	Thr	Asn	Ser	225	230	235	240
Thr	Gly	Gly	Ser	Glu	Thr	Gly	Gly	Ala	Ala	Asn	Ser	Ser	Ser	Thr	Ser	245	250	255	
Asn	Pro	Ser	Ser	Ala	Lys	Trp	Ser	Arg	Phe	Thr	Val	Tyr	Asp	Asp	Ala	260	265	270	
Ser	His	Thr	His	Gln	Leu	Arg	Pro	Ala	Arg	Arg	Gln	Glu	Lys	Leu	Gly	275	280	285	
Lys	Met	Leu	Lys	Asp	Phe	Leu	Ala	Gly	Asn	Ser	Lys	Lys	Arg	Glu	Glu	290	295	300	

Glu	Arg	Ile	Ala	Lys	Glu	Ala	Ala	Asp	Ala	Gln	His	Gln	Leu	Ser	Leu	305	310	315	320
Val	Gln	Ser	Trp	Ile	Asn	Gly	Tyr	Gly	Gln	Glu	Lys	Leu	Ala	Asp	Lys	325	330	335	
Lys	Asp	Pro	Ala	Lys	Val	Ser	Ala	Ser	Phe	Val	Glu	Lys	Tyr	Gly	Arg	340	345	350	
Cys	Gln	Glu	Val	Ile	Gly	Arg	Gly	Ala	Phe	Gly	Val	Val	Arg	Ile	Ala	355	360	365	
His	Lys	Val	Asp	Pro	Gln	Asn	Ser	Gly	Ser	Glu	Thr	Leu	Tyr	Ala	Val	370	375	380	
Lys	Glu	Phe	Arg	Arg	Lys	Pro	Ala	Glu	Ser	Gln	Lys	Lys	Tyr	Thr	Lys	385	390	395	400
Arg	Leu	Thr	Ser	Glu	Phe	Cys	Ile	Ser	Ser	Ser	Leu	Arg	His	Pro	Asn	405	410	415	
Val	Ile	His	Thr	Leu	Asp	Leu	Ile	Gln	Asp	Gly	Lys	Gly	Asp	Tyr	Cys	420	425	430	
Glu	Val	Met	Glu	Leu	Cys	Ser	Gly	Gly	Asp	Leu	Tyr	Thr	Leu	Ile	Met	435	440	445	
Ala	Ala	Gly	Arg	Leu	Glu	Pro	Met	Glu	Ala	Asp	Cys	Phe	Phe	Lys	Gln	450	455	460	
Leu	Met	Arg	Gly	Val	Asp	Tyr	Leu	His	Asp	Met	Gly	Val	Ala	His	Arg	465	470	475	480
Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	Leu	Thr	Val	Ser	Gly	Ser	Leu	Lys	485	490	495	
Ile	Thr	Asp	Phe	Gly	Asn	Gly	Glu	Cys	Phe	Arg	Met	Ala	Trp	Glu	Lys	500	505	510	
Glu	Ala	His	Met	Thr	Cys	Gly	Leu	Cys	Gly	Ser	Ala	Pro	Tyr	Ile	Ala	515	520	525	
Pro	Glu	Glu	Tyr	Thr	Glu	Ser	Glu	Phe	Asp	Pro	Arg	Ala	Val	Asp	Val	530	535	540	
Trp	Ala	Cys	Gly	Val	Ile	Tyr	Met	Ala	Met	Arg	Thr	Gly	Arg	His	Leu	545	550	555	560
Trp	Arg	Val	Ala	Lys	Lys	Ser	Glu	Asp	Glu	Tyr	Tyr	Ser	Arg	Tyr	Leu	565	570	575	
Met	Asp	Arg	Lys	Asn	Glu	Ser	Gly	Tyr	Glu	Pro	Ile	Glu	Met	Leu	Glu	580	585	590	
Arg	Ser	Arg	Cys	Arg	Asn	Thr	Leu	Tyr	Asn	Ile	Leu	His	Pro	Asn	Pro	595	600	605	

Thr Tyr Arg Leu Thr Ala Lys Gln Ile Met Lys Ser Glu Trp Val Arg
 610 615 620

Ser Ile Thr Leu Cys Glu Ala Gly Asn Ala Gly Leu
 625 630 635

<210> 40

<211> 650

<212> PRT

<213> Schizosaccharomyces pombe

<400> 40

Met Ser Val Thr Pro Pro Asn Val Gln Phe Asn Leu Asn Gly Asp Ser
 1 5 10 15

Asp His Lys Ser Asp Asn Ser Ser Ser Ser Leu Glu Asn Lys Leu Asp
 20 25 30

Thr Glu Leu Lys Ile Thr Ser Pro Pro Arg Asn Pro Pro Gln Arg Leu
 35 40 45

His Pro Val Asp Phe Ser Glu His Ala Asp Thr Asp Asp Asp Met Asn
 50 55 60

His Pro Leu Pro Arg Val Gln Ser Pro Val His Ile Lys Asn His Ile
 65 70 75 80

Asp Pro Lys Leu Ala Glu Asp Arg Tyr Arg Ser Ser Ala Ala Arg His
 85 90 95

Phe Glu Pro Ile Ser Ile Pro Pro Ser Ala Ile Thr Ser Glu Asp Glu
 100 105 110

Asp Asp Tyr His Gly Ser Ala Asn Ser Ser Thr Val Leu Pro Pro Arg
 115 120 125

Thr Glu Asn Ala Leu His Ala Ala Ser Pro Lys Pro Ser Gly Ser Thr
 130 135 140

Gly Tyr Thr Ser Pro Ala Leu Ser Gln Asn Ser Gly Ser Gly Gly Glu
 145 150 155 160

Gly Glu Ser Asp Glu Gly Ser Phe Asn Thr Gln His His Arg Ser Pro
 165 170 175

Ile Phe Gln Ala Tyr Pro Ser Ser Glu Asp Leu Val Gly Asp Pro Asn
 180 185 190

Asp Pro Tyr Arg Arg Thr Arg Arg Ala Pro Ile Lys Thr Asn Pro His
 195 200 205

Asp Ile Pro Ser Gln Phe Ile Phe Arg Lys Leu Gly Leu His His Gly
 210 215 220

Lys His Gly His His Gly His Ser Gly Ser Leu Ser Leu Lys Ser Leu
 225 230 235 240

Val	Pro	Asn	His	His	Asp	Lys	His	Asp	Lys	His	Asp	Lys	His	Glu	Lys		
				245					250					255			
His	His	Ser	Ser	Leu	Asp	Leu	Arg	Arg	Phe	Phe	Lys	Ser	His	Gln	Lys		
			260					265					270				
Thr	Asp	Lys	Glu	Lys	Lys	Pro	Ser	Val	Ser	Lys	Ser	Lys	Ser	Ser	Ala		
		275					280						285				
Asn	Leu	Gln	Asp	Asp	His	Phe	Gly	Leu	Phe	Lys	Lys	Tyr	Gly	Lys	Phe		
	290					295					300						
Gly	Arg	Met	Leu	Gly	Ser	Gly	Ala	Gly	Gly	Ser	Val	Arg	Ile	Met	Lys		
305					310					315					320		
Arg	Ser	Ser	Asp	Gly	Lys	Ile	Phe	Ala	Val	Lys	Glu	Phe	Arg	Ala	Arg		
				325					330					335			
Arg	Pro	Thr	Glu	Thr	Glu	Arg	Glu	Tyr	Ala	Arg	Lys	Val	Thr	Ala	Glu		
			340					345					350				
Phe	Cys	Ile	Gly	Ser	Ala	Leu	His	His	Thr	Asn	Ile	Ile	Glu	Thr	Leu		
		355					360					365					
Asp	Ile	Val	Glu	Glu	Asn	Lys	Lys	Phe	Tyr	Glu	Val	Met	Glu	Tyr	Ala		
	370					375					380						
Pro	Tyr	Asp	Met	Phe	Ser	Ile	Val	Met	Ser	Gly	Lys	Met	Thr	Met	Pro		
385					390					395					400		
Glu	Val	Tyr	Cys	Cys	Phe	Lys	Gln	Leu	Leu	Ser	Gly	Val	Ala	Tyr	Leu		
				405					410					415			
His	Ser	Met	Gly	Leu	Ala	His	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Leu	Val		
			420					425					430				
Val	Asp	Ser	Asn	Cys	Phe	Val	Lys	Ile	Ile	Asp	Phe	Gly	Ser	Ala	Val		
		435					440					445					
Val	Phe	Lys	Tyr	Pro	Phe	Glu	Ala	Asp	Ile	Val	Glu	Ala	Thr	Gly	Val		
	450					455					460						
Val	Gly	Ser	Asp	Pro	Tyr	Leu	Ala	Pro	Glu	Thr	Leu	Val	Arg	Lys	Leu		
465					470					475					480		
Tyr	Asp	Pro	Arg	Ala	Val	Asp	Ile	Trp	Ser	Ser	Ala	Ile	Ile	Phe	Cys		
				485					490					495			
Cys	Met	Ala	Leu	Arg	Arg	Phe	Pro	Trp	Lys	Tyr	Pro	Lys	Leu	Ser	Asp		
		500						505					510				
Asn	Ser	Phe	Arg	Leu	Phe	Cys	Met	Lys	Gln	Pro	Ser	Asn	Asp	Ala	Glu		
		515					520					525					
Ser	Pro	Ser	Asp	Ile	Leu	Ala	Asp	Ile	Lys	Lys	Gln	Arg	Leu	Val	Glu		
	530					535					540						

Gln Gly Cys Glu Pro Ile Arg Lys Thr Asp Glu Ser His Ser Pro Asn
 545 550 555 560
 Ser Lys Thr Asp Asn Ser Ser Thr His Lys Gln Glu Leu Tyr Gly Pro
 565 570 575
 Trp Arg Leu Leu Arg Leu Leu Pro Arg Glu Thr Arg Ala Val Ile Ala
 580 585 590
 His Met Leu Glu Leu Asp Pro Val Lys Arg Tyr Asp Ile His Arg Val
 595 600 605
 Phe Ala Asp Asn Trp Ile Asn Asp Ile Ser Met Cys His Met Glu Asn
 610 615 620
 Gly Lys Val Ile His Ser Pro Thr His Val His Asn Leu Val Ala Ser
 625 630 635 640
 Glu Glu Ser Pro Ala Pro Pro Ala Lys His
 645 650

<210> 41
 <211> 812
 <212> PRT
 <213> Candida albicans

<400> 41
 Met Thr Lys Glu His Ser Ile Arg Asn Ile Phe Lys Lys Asp Lys Thr
 1 5 10 15
 Pro Asp Asn Gly Ser Ala Thr Ala Thr Pro Ser Ser Ser His Thr Gly
 20 25 30
 Leu Ser Lys Leu Phe His Lys Glu Ser Lys Pro Ile Thr Pro Pro Met
 35 40 45
 Lys Arg Thr Pro Ser Val Ser Ser Leu Lys Arg Arg Asn Thr Asn Pro
 50 55 60
 Ser Gln Thr Ser Gly Ile Ser Leu Asn His Asn His His His His Gln
 65 70 75 80
 Asp Ser Gln Asn His Asn Asp Ala Thr Thr Ser Gly Gly Asn Ile His
 85 90 95
 Ser Ser Thr Pro Val Asn Arg Ser Arg Ser Asn Ser Asp Arg Leu Gly
 100 105 110
 His Val Pro Pro Thr Gly Arg Lys Val Leu Ser Lys Ala Glu Thr Phe
 115 120 125
 Thr His Leu Gln Gln Leu Asp Thr Arg Asn Ala Ala Lys Asn Gln Leu
 130 135 140
 Arg Asn His Arg Ile Pro Ser Asn His Leu Ser Ser Pro Leu Ser Ala
 145 150 155 160

Ala	Pro	His	Ser	Asp 165	Lys	Ile	Val	Tyr	Asn 170	Pro	Tyr	Gly	Leu	Asn 175	Lys	
Thr	Ala	Thr	Gln 180	Glu	Arg	Pro	Lys	Asn 185	Thr	Ser	Phe	Tyr	Leu 190	Ser	Gly	
Val	Asn	Asp 195	Gly	Glu	Arg	Val	Leu 200	Ser	Asn	Pro	Val	Ala 205	Ser	Pro	Asn	
Asp	Tyr 210	Leu	Pro	Ala	Glu	Leu 215	Gln	Gln	Gln	His	Val 220	Asn	Leu	Leu	Glu	
Asp 225	Phe	Glu	Ile	Asp	Val 230	Gly	Thr	Lys	Lys	Leu 235	Gly	Asp	Gly	Gly	Ser 240	
Ser	Asp	Val	Arg 245	Ile	Ile	Asn	Ser	Cys	His 250	His	Lys	Lys	Asp	Leu 255	Tyr	
Ala	Leu	Lys	Lys 260	Phe	Thr	Leu	Leu	Ser 265	Lys	Glu	Thr	Asp	Glu 270	Asp	Phe	
Tyr	Lys	Arg 275	Val	Ser	Glu	Glu	Tyr 280	Lys	Ile	His	Arg	Lys 285	Ala	Ala	Ile	
Ser	Arg	His 290	Val	Val	Asp	Ala 295	Phe	Ala	Ile	Leu	Arg 300	Ile	Gln	Ser	Gln	
Ser 305	Asn	Leu	Thr	Arg	Gly 310	Trp	Gly	Met	Val	Met 315	Glu	Phe	Cys	Gly	Gly 320	
Gly	Asp	Leu	Phe	Ser 325	Val	Ile	Val	Lys	Pro 330	Gly	Trp	Lys	Ser	Thr 335	Pro	
Leu	Ala	Glu	Lys 340	Tyr	Cys	Leu	Phe	Lys 345	Gln	Ile	Ala	Tyr	Gly 350	Val	Lys	
Phe	Leu	His 355	Asp	His	Asp	Ile	Val 360	His	Arg	Asp	Leu	Lys 365	Pro	Glu	Asn	
Val	Leu	Leu	Asp 370	Ala	Asn	Gly 375	Leu	Ala	Lys	Leu	Cys 380	Asp	Phe	Gly	Val	
Ser 385	Glu	Phe	Gly	His	Glu 390	Val	Pro	Glu	Asp	Phe 395	Ser	Ser	Pro	Val	Lys 400	
Leu	Ser	Thr	Ala 405	Tyr	Val	Gly	Ser	Pro	Pro 410	Tyr	Ala	Pro	Pro	Glu 415	Val	
Met	Leu	Leu	Lys 420	Glu	Lys	Ser	Ser	Thr 425	Glu	Ile	Lys	Ala	Phe 430	Ala	Tyr	
Asp	Pro	Phe 435	Lys	Met	Asp	Cys	Trp 440	Gly	Leu	Gly	Met	Leu 445	Leu	Phe	Cys	
Leu	Val	Tyr	Gly	Gly	Val	Pro 455	Phe	Gln	Gln	Ser	Ser 460	Pro	Asn	Asp	His	

Ala	Phe	Arg	Asp	Tyr	Lys	Phe	Ser	His	Lys	Arg	Phe	Cys	Thr	Asp	His
465					470					475					480
His	Thr	Phe	Lys	Ser	Asn	Gln	Gly	Tyr	Pro	Arg	Gly	Pro	Gly	Ser	Glu
			485						490					495	
Phe	Lys	Leu	Ala	Ala	Lys	Phe	Glu	Asn	Asn	Gly	Ala	Ser	Arg	Val	Ala
			500					505					510		
Trp	Lys	Leu	Cys	Asp	Pro	Ser	Glu	Asn	Thr	Arg	Tyr	Thr	Met	Asp	Met
		515					520						525		
Leu	Phe	Asp	Asp	Pro	Trp	Phe	Gln	Ser	Val	Glu	Met	Cys	Ile	Tyr	Glu
	530					535					540				
Ser	Pro	Asp	Gln	Glu	Val	Asn	Pro	Phe	Val	Leu	Pro	Gly	Thr	Gly	Glu
545					550					555					560
Asn	Ile	Asp	Thr	His	Ser	Val	Ser	Gly	Tyr	Ser	Ser	Val	Asn	Asn	Ser
				565					570					575	
Gln	Ala	Pro	Ser	Arg	Arg	Gly	Thr	Phe	Thr	Ser	Arg	Pro	Val	Gly	Ser
			580					585					590		
Gly	Ala	Gly	Ser	Gly	Tyr	Asn	Ser	His	Asp	Glu	Ser	Ser	Asn	Gly	Leu
		595					600						605		
Ser	Ser	Ser	Phe	Arg	Ser	Met	Leu	Asp	Leu	Lys	Asp	Ile	Pro	Gln	Lys
		610				615					620				
Ile	Thr	Lys	Thr	Asp	Glu	Pro	Leu	Pro	Ser	Asn	Ser	Ser	Val	His	Ser
625					630					635					640
Asn	Asp	Ser	Ser	Ser	Ala	Arg	Ala	Lys	Ser	Lys	Leu	Asp	His	Pro	Ser
				645					650					655	
Ser	Pro	Gly	Ser	Leu	Leu	Ser	Pro	Ser	Thr	Pro	Ala	Leu	Gln	Ser	Ile
			660					665					670		
Pro	Ala	Asp	Arg	Val	Ala	Gln	Thr	Thr	Ser	Pro	Ile	Asn	Ala	Ser	Leu
		675					680					685			
Pro	Ala	Val	Glu	Glu	Ser	Asp	Ile	Glu	His	Glu	Ser	Glu	Ser	Glu	Ile
		690				695					700				
Gln	Gly	Asp	Glu	Thr	Glu	Ser	Ser	Gly	Leu	Gln	Val	Leu	Pro	Pro	Ile
705					710					715					720
Asp	Asp	Val	Val	Ala	Ala	Ser	Pro	Ser	Ser	Leu	Thr	His	Glu	Pro	Gln
				725					730					735	
Glu	Gln	Val	Leu	Asp	Ser	Val	Glu	Ser	Cys	Ile	Ser	Leu	Pro	Pro	Asn
			740					745					750		
Arg	Asp	Gln	Ala	Phe	Ala	Gly	Lys	Asp	Gly	Glu	Met	Cys	Ser	Leu	Val
		755					760					765			

Asp Leu Lys Pro Ala Ala Leu Lys Ser Ala Thr Asp Leu Gln Leu Gly
 770 775 780

Ala Asp Gly Met Cys Asn Leu Gly Tyr Lys Ile Lys Lys His His His
 785 790 795 800

Thr Glu Val Ser Asn Val Ser Asn Ser Ser Arg Arg
 805 810

<210> 42

<211> 800

<212> PRT

<213> Candida albicans

<400> 42

Met Ser Ser Leu Thr Lys Leu Leu His Glu Ser Thr Ser Thr Leu Ala
 1 5 10 15

Ser Pro Val Leu Ser Arg Asn Thr Ser Glu Val Thr Phe Lys Asp Gln
 20 25 30

Gly Arg Arg Thr Pro Glu Ile Leu Asn Ile Ser Asp Thr Val Asp Ala
 35 40 45

Lys Ser Pro Gly Ile Thr Ile Asp Val Ser Lys Pro Lys Pro Ser Pro
 50 55 60

Ile Asp Thr Asp Gly Met Asn Val Glu Pro Gln Ala Val His Gly Phe
 65 70 75 80

Asp Pro Ser Pro Asn Thr Lys Val Ser Phe Ser Ser Pro Phe Ser Pro
 85 90 95

Thr Ser Pro Phe Thr Arg Gln Ser Ser Asn Ser Phe Ser Ser Asn Gln
 100 105 110

Ala Phe Gln Asn Thr Arg Gly Ala Val Ala Ser Pro Arg Tyr Ile Lys
 115 120 125

Asn Asn Ser Val Ser His Ser Ser Val Phe Met Gly Gly Glu Ser Leu
 130 135 140

Ser Ser Ser Ile Pro Tyr Ser Ala Pro Gly Gly Arg Gly Asn Pro
 145 150 155 160

Ala Ser His Ser Gly Asn Thr Gly Ser Leu Gln Arg Glu Asn Ser Phe
 165 170 175

Ser Ser Leu Asn Thr Ser Asp Ser Asn Ser Ser Ala His Ile Pro Asn
 180 185 190

Leu Pro Asn Gly Gln Pro Ile Asn Ser Ile His Ile Gln Ser Pro Gln
 195 200 205

Val Ser Ala Ser Ser Ile Asp Ser Arg Phe Val Val Ser Lys Gln Arg
 210 215 220

Ile	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Ser	Leu	Ser	Ser	Ser	Gln	Arg	Ser	225	230	235	240
Asn	Ser	Gln	Ser	Gly	Leu	Ser	Phe	Phe	Phe	Ser	Gln	Lys	Ser	Lys	Pro	245	250	255	
Ala	Val	Lys	Arg	Asp	Ser	Thr	Thr	Asp	Leu	Gly	Ala	Phe	Tyr	Asn	Asn	260	265	270	
Ser	Tyr	Gln	Asp	Arg	Asp	Ala	Pro	Ile	Val	Ser	Gly	Ser	Pro	Asn	Ser	275	280	285	
Leu	Ser	Ser	Ala	Glu	Ser	Thr	Val	Ser	Tyr	Gly	Ser	Ser	Ala	Pro	Thr	290	295	300	
Arg	His	Asn	Ser	Met	Ala	Asn	Leu	Lys	Arg	Phe	Phe	Lys	Lys	Ser	Thr	305	310	315	320
Pro	Thr	Thr	Ser	Gln	Pro	Val	Gly	Thr	Ser	Asn	Leu	Ser	Ser	Ser	Leu	325	330	335	
Arg	Ser	Ala	Ser	Ser	Gly	Ala	Ser	Gly	Ala	Met	Asn	Ile	Pro	Asn	Ser	340	345	350	
Leu	Asn	Gly	Gln	Thr	Asn	Asn	Gly	Tyr	Gln	Ser	Pro	Ser	Ser	Phe	Ser	355	360	365	
Ala	Ser	Thr	Ser	Asn	Thr	Ser	Tyr	Ser	Gln	Ser	Pro	Gly	Thr	Asn	Ser	370	375	380	
Ser	Ser	Val	Thr	Arg	Ser	Ser	Thr	Leu	Gln	Asn	Lys	Val	Asn	Tyr	His	385	390	395	400
Glu	Arg	Arg	Gln	Ser	Val	Ser	Gly	Ile	Val	Asn	Asn	Ser	Gln	Gln	Leu	405	410	415	
Pro	Phe	Ser	Lys	Arg	Tyr	His	Ser	Lys	Asn	Ala	Glu	Ser	Leu	Gly	Ala	420	425	430	
Gly	Ala	Gly	Gly	Ser	Val	Arg	Leu	Leu	Thr	Arg	Val	Ser	Asp	Gly	Leu	435	440	445	
Thr	Phe	Ala	Val	Lys	Glu	Phe	Arg	Ala	Lys	Tyr	Gln	Asn	Glu	Ser	Lys	450	455	460	
Arg	Asp	Tyr	Ala	Lys	Lys	Ile	Thr	Gly	Glu	Tyr	Cys	Ile	Gly	Ser	Thr	465	470	475	480
Leu	Lys	His	Pro	Asn	Ile	Ile	Glu	Thr	Val	Glu	Ile	Cys	Tyr	Glu	Asn	485	490	495	
Glu	Arg	Ile	His	Gln	Val	Met	Glu	Tyr	Cys	Asp	Phe	Asp	Leu	Phe	Ala	500	505	510	
Ile	Val	Met	Ser	Asn	Lys	Met	Ser	Arg	Glu	Glu	Ile	Asn	Cys	Cys	Phe	515	520	525	

Lys	Gln	Ile	Leu	Ala	Gly	Val	His	Tyr	Leu	His	Ser	Met	Gly	Leu	Ala	530	535	540
His	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Cys	Val	Ile	Asp	Lys	Arg	Gly	Ile	545	550	555
Val	Lys	Ile	Ile	Asp	Phe	Gly	Ser	Ala	Val	Val	Phe	Ser	Tyr	Pro	Phe	565	570	575
Thr	Lys	Thr	Leu	Ile	Glu	Ala	Gln	Gly	Ile	Val	Gly	Ser	Asp	Pro	Tyr	580	585	590
Leu	Ala	Pro	Glu	Val	Cys	Val	Phe	Asn	Lys	Tyr	Asp	Pro	Arg	Pro	Val	595	600	605
Asp	Val	Trp	Ser	Val	Ala	Ile	Ile	Tyr	Cys	Cys	Met	Met	Leu	Lys	Lys	610	615	620
Phe	Pro	Trp	Lys	Val	Pro	Lys	Leu	Ser	Asp	Ser	Ser	Phe	Lys	Leu	Phe	625	630	635
Ala	Ser	Arg	Gly	Glu	Phe	Ile	Pro	Ile	Ser	Glu	Met	Leu	Lys	Lys	Thr	645	650	655
Pro	Asn	Asp	Met	Glu	Lys	Ser	Asn	Ser	Asn	Gly	Ser	Ser	Gly	Gly	Gly	660	665	670
Leu	Ser	Asn	Leu	Glu	Asp	Ile	Ser	Glu	Ala	Leu	Glu	Asp	Glu	Ile	Thr	675	680	685
Ala	Gly	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Thr	Gly	Gln	Asn	Gly	Ala	Thr	690	695	700
Ala	Asn	Gly	Lys	Asp	His	Thr	Ser	Ser	Glu	Thr	Gly	Ala	Asn	Arg	Leu	705	710	715
Leu	Leu	Ala	Leu	Pro	Glu	Asp	Cys	Arg	Arg	Leu	Ile	Gly	Arg	Met	Val	725	730	735
Glu	Leu	Ala	Pro	Ala	Cys	Arg	Ile	Thr	Ile	Asp	Glu	Val	Leu	Asn	Asp	740	745	750
Ser	Trp	Leu	Lys	Ser	Val	Asn	Met	Cys	Thr	Val	Glu	Glu	Ser	Ser	Pro	755	760	765
Gly	Val	Phe	Glu	Val	Ile	Lys	Cys	Glu	Asp	His	Glu	His	Thr	Gln	Val	770	775	780
Asp	Gln	Ser	Lys	Ala	His	Ile	Ala	Ala	Phe	Glu	Lys	Asn	Lys	Lys	Lys	785	790	795
																		800